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UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Vol. 36, No. 4

April, 1933

MONTHLY
LABOR REVIEW



SPECIAL FEATURES IN THIS ISSUE

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Accidents in manufacturing industries, 1926 to 1931, p. 780

Building operations in principal cities, 1932, p. 833

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Trend of wages in Great Britain since 1924, p. 871

NEW PUBLICATIONS OF THE BUREAU OF LABOR STATISTICS

Wages and hours of labor in the furniture industry, 1910 to 1931. Bulletin No. 571.

Wholesale prices, 1931. Bulletin No. 572.

Wages and hours of labor in metalliferous mining, 1924 and 1931. Bulletin No. 573.

Technological changes and employment in the United States Postal Service. Bulletin No. 574.

Wages and hours of labor in air transportation. Bulletin No. 575.

Wages and hours of labor in the slaughtering and meat-packing industry, 1931. Bulletin No. 576.

Wages and hours of labor in gasoline-filling stations and motor vehicle repair garages, 1931. Bulletin No. 578.

IN PRESS

Proceedings of the 19th annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Columbus, Ohio, September 26-29, 1932. Bulletin No. 577.

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, Secretary

BUREAU OF LABOR STATISTICS

CHARLES E. BALDWIN, Acting Commissioner

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This Issue in Brief

The second installment of a series of articles on self-help activities among the unemployed begins on page 717. These articles are the result of a field survey by the Bureau of Labor Statistics covering a number of communities where self-help activities have been undertaken, with varying degrees of success.

Accidents in manufacturing industries decreased in both frequency and severity in 1931 as compared with 1930, according to the annual survey by the Bureau of Labor Statistics, frequency rates declining 18.3 per cent and severity rates 8.2 per cent. In 1931 an average of 18.85 workers were injured for every 1,000,000 man-hours worked, resulting in a loss of 2.59 working days for every 1,000 man-hours worked. Page 780.

Hourly earnings of male workers in semivitreous-ware pottery factories averaged 53.5 cents in 1932 as compared with 70.5 cents in 1925, the date of the last previous survey made by the Bureau of Labor Statistics of wages and hours of labor in the pottery industry. In vitreous-ware factories, earnings were 54.6 cents in 1932 against 63.8 cents in 1925. Daily earnings in semivitreous-ware factories averaged \$4.13 in 1932 and \$5.70 in 1925 and in vitreous-ware factories, \$3.94 in 1932 and \$5.25 in 1925. Female workers in semivitreous-ware factories averaged 29.2 cents per hour and \$2.25 per day in 1932 as compared with 38.5 cents per hour and \$2.99 per day in 1925; in vitreous-ware factories their average earnings were 26.4 cents per hour and \$1.90 per day in 1932 and 32.9 cents per hour and \$2.55 per day in 1925. The hours worked in a two-week period, for males and females combined, averaged 57.6 in 1932 as against 72.5 in 1925 in semivitreous-ware factories, and 43.7 in 1932 as against 81.1 in 1925 in vitreous-ware factories. Page 853.

A cooperative farm plan organized in the spring of 1932 by the B. F. Goodrich Co., Akron, Ohio, assisted many former employees of the company as well as those working on part time to provide adequate subsistence for themselves and their families throughout the summer and a large part of the winter months. About 200 acres of land suitable for the raising of vegetables were under cultivation and a total of 936 men shared in the distribution of vegetables. The undertaking was in general so successful that the company plans to sponsor a similar garden program in 1933. Page 771.

The board of reference, appointed November 3, 1932, in the wage controversy between the United Mine Workers of America and the anthracite operators failed to agree, and individual reports were made on March 1, 1933, by the two members of the board. Extracts from the two reports are given in an article on page 815.

A recent study of the hazards to which women are exposed in vitreous enameling in the stove industry, made by the United States Women's Bureau, showed that the industry is one in which a relatively large number of women are exposed to lead poisoning. The majority of the women in the industry are employed either in spraying the enamel on sheet or cast iron, or as brushers in removing the excess enamel

after it has dried. The brushers were employed chiefly on sheet iron, on which a leadless enamel is used, and the sprayers on cast iron, which is covered with lead enamel. Page 789.

The serious effects of the prolonged industrial depression are indicated by the findings of a survey conducted in Philadelphia in May, 1932, by the research department of the Wharton School of Finance and Commerce, University of Pennsylvania. According to an estimate based on these findings, approximately 48,000 families in the city at that time did not have enough food to prevent actual hunger. It is also estimated that about 39,500 families had members who had no shoes or lacked other items of clothing essential for bodily comfort, and that 90,695 families had spent all their savings. Page 774.

An extremely low death rate was reached in 1932 among the several million industrial policyholders of the Metropolitan Life Insurance Co., in spite of the unfavorable economic conditions which prevailed throughout the year and which seriously affected the living standards of industrial workers and their dependents. The favorable record for the year is attributed to various factors such as the lack of any widespread epidemic, until influenza became prevalent toward the last of the year, and the effective functioning of health departments and clinics and the well-organized relief work. However, warning is given in the report of the adverse effects which may be expected if the radical curtailment in appropriations for these agencies, which is now taking place, is continued. Page 786.

The cost of the family budget in Canada, as published by the Canadian Department of Labor, has declined 27.6 per cent during the present depression, totaling only \$16.01 in December, 1932, as compared with \$22.11 in December, 1929. The shrinkage in the cost of food during this period is even more striking—from \$11.83 to \$7.04, or 40.5 per cent. The rent for a quarter of a month showed a reduction from \$6.98 to \$5.99, or 14.2 per cent. Clothing is not included in the budget. Page 965.

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Self-Help Activities of Unemployed in Los Angeles¹

IN THE Los Angeles region the cooperative self-help activities of the unemployed are of two types: (1) Those limited to the exchange of the labor of the members for surplus commodities of all sorts, to be used by the whole group; and (2) those whose purpose is the promotion of the barter system—the exchange of one commodity for another between individual members, or between a member and the organization.

In the first type all work is done for the organization, not for the account of any individual member, and the distribution of the surplus commodities so obtained takes place on the basis of need, not on the basis of remuneration for work performed. In the second type each member is working for himself; any articles brought in by him or any hours of labor performed go to his credit on the books. In the first class of organization it is evident that no medium of exchange or currency is necessary; in the second, scrip or some evidence of credit must be used.

To be a member of the first type of association practically the only requirement is that the person be partially or wholly unemployed. No dues or fees are required and there are no paid officers or employees. The only condition is that, to be eligible to receive supplies from the association, the member must perform a minimum period of service for the association, usually two days a week.

Both individuals and firms are accepted for membership in the second class of organization; a membership fee is generally required; and a certain amount of cash is usually necessary in order to utilize the services available through the organization. In all of these organizations there is a staff of employees, all of whom are paid in credits of the association.

The exemplar of the first class is the Unemployed Cooperative Relief Association, a federation of some 45 local "units," as they are called, in Los Angeles County. There are in addition nearly as many independent relief associations not yet affiliated with this organization. The movement is growing so rapidly that no one can speak with certainty, but it is estimated that in southern California from 125,000 to 150,000 persons are dependent upon this relief movement which is being carried on by the unemployed themselves. The present study was confined to the federation and its units.

In the second class four exchanges, whose registered membership numbers about 7,600 persons and firms, were studied. Of these the Los Angeles Cooperative Exchange, with 5,600 members, is by far the largest.

¹ This is the second series of articles on self-help activities, the first having appeared in the March issue of the *Monthly Labor Review*.

Unemployed Cooperative Relief Association

THE beginning of this association dates from the spring of 1932, when an unemployed veteran in Compton, a suburb of Los Angeles, conceived the idea of going out into the country to see if he could perform service for some farmer in exchange for vegetables. He found one who employed him at pulling weeds and gave him at the end of the day a sackful of vegetables to take home. The amount being more than his family could use, he gave some to his neighbor. The next day the neighbor accompanied him. After several days a number of others joined these two, walking out to the country and returning with the produce on their backs. This attracted the attention of a local mover and he offered the use of a truck and, later, of part of his warehouse as a distributing center for the produce.

At the end of two months an informal organization was formed, with the mover above mentioned as manager, and in a short while this organization had some 500 families in membership. From this point onward the movement grew very rapidly. Other localities heard what was being done in Compton and sent men to find out how to start similar working groups; each of these not only received advice but went home with tangible evidence of what could be obtained by group action—a sack of vegetables or whatever else was available.

During the time since this first unit was formed many hundred thousand tons of vegetables and fruit have been gathered and salvaged for the use of the unemployed and their families which otherwise would have gone to waste.

To such an extent has the movement grown that by March, 1933, there were 45 units of unemployed in Los Angeles County (some 23 in the city itself). These units are affiliated in the Unemployed Cooperative Relief Association. There are also about as many independent units working along similar lines but not affiliated with the association. Altogether there are said to be 103 such organizations in Southern California.

Progress of Association

Food.—The association has been eminently successful in obtaining vegetables. Situated as it is in a section of the country in which crops are available nearly the entire year, the association has been able to make contacts which have brought in an ample supply of all kinds of fruits and vegetables except potatoes. The latter are only a summer crop in this section and the units have resorted to various means to obtain supplies for the winter. In some cases a unit has been able to exchange oranges for the surplus potatoes of a northern unit; in other cases the public authorities have supplied funds for their purchase.

Staple groceries are also very difficult to obtain, as there are few ways in which they can be obtained in sufficient quantities through the labor of the members, which is the only purchasing power of the association. The city units of the association have been assisted in this respect by an agreement signed January 24, 1933, with the local public welfare department by which \$6,000 was made available to the association for the purchase of groceries to be distributed to the city units through the warehouse of the association's county council. This money has been used to buy, at wholesale prices, bread, cereal, salad and cooking oils, coffee, sugar,

potatoes, flour, yeast, and soap. These have been issued to the various units in amounts varying according to their membership, and each family could draw its supplies from the unit once a week. Every cent of this sum went for actual supplies, since, all services being donated, there was no overhead expense involved.

The money so furnished was all spent by the end of February, and the value of the services rendered by the association was recognized when the city made an additional appropriation of \$10,000 (for the city units), which was matched by Los Angeles County by a similar amount for the county units outside the city. The use of the funds, however, was delayed by the bank holiday, which prevented the money being obtained.

Exasperated by the spectacle of milk and other food supplies of various sorts being thrown away while at the same time there were people in dire need of these supplies, the association and certain influential friends brought the matter to public attention, the result being that a food administration office was set up with the duty of seeing that no food is wasted. Milk (whole and skimmed) not sold is turned over to the association, as are also fruit and vegetables in transit or in storage which are in danger of spoiling and are condemned by the health department. In this way, much usable food is salvaged that would otherwise go to waste.

Two bakeries run by the association supply the major part of the bread distributed to the members; these use Red Cross flour obtained by individual members, but they have never been able to obtain sugar in the amount called for by the recipe. Much canning of fruits and vegetables has been done by individual units and hundreds of barrels of sauerkraut have been made.

Some idea of the service rendered by the association is given by figures published by the Los Angeles County Food Administration for September, 1932. These showed that during that month the 44 units distributed 4,730,700 pounds of produce to 24,716 families (107,136 persons), at a total cost (gasoline and oil only) of \$2,588.

Transport and communication.—Gasoline has been characterized as the lifeblood of the unemployed relief movement. Without gasoline for the trucks which bring in the supplies the relief work is paralyzed. In the early days of the movement many thousands of gallons were donated but these donations gradually fell off, while at the same time the requirements grew rapidly as the movement expanded. Some of the leaders used their own credit to obtain the gasoline that was necessary if the crops were to be gathered before they spoiled. Finally, the emergency was recognized by the local public authorities, which now, on the basis of mileage and of tonnage of supplies handled, furnish a sufficient amount of gasoline and motor oil to keep the trucks moving. The local traffic court also is assisting in the solution of the transportation problem by requiring traffic offenders who lack cash with which to pay their fines to put themselves and their machines at the disposal of the association for the term of their sentence. When their time is served, the fact is certified by the manager of the unit to which they have been assigned and this certification, presented to the court, serves as a release for the offender.

The association has been attempting to make arrangements with the State authorities at Sacramento for free license plates for the trucks used in the relief work.

The association is setting up a system of short-wave radio transmission, having obtained an amateur's license therefor, and through this the crop conditions and surpluses of one section will be made known to other sections and exchange of goods can be arranged for without loss of time and without expenditure for long-distance telephone or telegraph.

Housing.—Housing has been one of the directions in which comparatively little success has been attained. One of the leaders of the movement states that the organization has been able to provide quarters for only about 20 per cent of the families evicted. A plan is now being worked out which it is hoped will be more successful.

Supplies furnished in relation to total budget.—It is seen that those items of the budget which the association can not supply must be obtained by the member from the proceeds of whatever outside paid work he can find. He has, however, plenty of time to look for work, as most of the units require his services for two days a week or less. (Figures kept for a period of 90 days showed that one man by 8 hours' labor could bring in supplies sufficient for 22 persons for one week.)

Money received by Los Angeles County from the Reconstruction Finance Corporation is being used to provide work on flood control, park clean-up, and other projects, and the work so furnished is helping to ease the employment situation. Men registered with the various units of the Unemployed Cooperative Relief Association are being given work, 10 days each, in rotation. The money so earned, with what the men are able to earn on casual jobs here and there, helps to provide some of the necessities which the association has thus far been unable to furnish.

The association estimates that in general the food supplies issued through its warehouses represent about 70 per cent of the normal requirements of a well-balanced diet. Meat, however, can be secured only occasionally and then not in sufficient quantities; butter also is absent from the list of supplies; and, as already noted, certain staples such as sugar, coffee, etc., are available only in small quantities.

Although nominally the association functions as a whole, in reality the supplies and services obtainable vary considerably from unit to unit. Food—milk, vegetables, fruit, and a certain amount of staple groceries—is available at every unit; the older and more aggressive locals, however, furnish a considerably larger variety of other services than the newer units. The majority of the locals operate kitchens at which are fed the single members and the members who are donating their time. Most of them also collect and distribute used clothing, hats, and shoes, and a considerable number also have a shoe-repair service.

Each unit has its warehouse and certain of these also serve as district warehouses through which exchanges of surpluses are made between units. There is also a wholesale, or county, warehouse, through which pass the goods received through the local food administration and those purchased with the \$6,000 city appropriation.

Income.—No fees of any kind are charged and it is part of the code of the organization that no commodity coming into its possession may be sold for cash, as it would thus compete with local dealers. The aim of the association is to care for that section of the consuming public which has little or no cash; persons with cash are expected to spend it through the ordinary channels of trade.

It is evident, however, that a certain amount of cash is required to meet the association's expenses for telephone, stamps, etc. This is obtained in various ways by the different locals. Some give paid entertainments; some utilize the labor of their members in shelling walnuts for a local growers' association at a fixed cash rate; some collect the caps of ginger-ale bottles at a cent apiece; some collect and sell old newspapers, etc.

Loyalty of members.—The only remuneration, from the chairman down to the sorters of vegetables, is the right to draw food supplies from the association, the amount being regulated by the number of dependents, and this right is contingent upon the member's donating the required amount of time to the association each week.

There are occasional cases of exploitation of the association by unworthy members but these, it is reported, do not last long. Each unit has its own corps of investigators whose business it is to see that the condition of need is what the member applying for other assistance than food represents it to be.

The movement, in fact, seems to have succeeded in obtaining from its members, and above all from its officials, a marked devotion. Each person connected with the movement with whom conversation was held seems convinced that his or her job is the keystone of the arch without which the whole edifice would collapse.

Organization

THE association has never been incorporated, and has never tried to operate along hard and fast lines. In the course of its existence, however, it has held firmly to five guiding principles—that it shall be nonprofit-making, nonsectarian, nonpolitical, without dues, and without salaried officials.

Under the present arrangement each local unit is practically autonomous, having its own by-laws (modeled on those of the central organization but modified to cover any special local conditions it may have to meet) and determining to a considerable extent its local policies. Each unit has three representatives on the county council of the association covering Los Angeles County. There is also a loose State organization which has already held several meetings.

The by-laws provide that general meetings shall be held at least twice a month. Meetings of delegates to the county council are held every Friday afternoon, each unit being entitled to representation by its manager and two other members. At these meetings all matters of general policy are thrashed out and few acts of the officials go unexamined.

Each unit elects an executive board of seven for a term of three months. This board meets once a week. The officers of the unit are elected by and from the executive board. Officers and directors can be removed by general vote on charges made in writing by three members.

The by-laws provide for the appointment of three trustees every six months to audit the accounts of the unit. Some units, however, have their books audited by a public accountant.

The term of office of the manager varies in the different units. Some elect a new manager every three months, some every six months. The manager is entitled to appoint his assistants.

Recently a large general committee has been set up, called the citizens' committee, composed of prominent Los Angeles business and professional men; these men will give the association the benefit of their experience in an advisory capacity.

Basis of Operation

THE underlying principle on which the association operates is that of the need of the individual.

The new member joins, receives his membership card, and is at once entitled to begin drawing his ration of foodstuffs. In return he is usually expected to contribute at least two days' work a week to the association. A test of the altruism of the membership lies in the fact that the married man with a family of, say, five, who works his two days is entitled to draw supplies for the whole family, while the bachelor donating the same amount of labor draws only for himself.

There is no such thing as "credits" for work done in this organization. If the organization has an opportunity to renovate a house in return for a lease thereon, a set of carpenters, painters, plasterers, etc., may work every day for a week on the job, but they do not thereby accumulate credit for time put in; they are merely regarded as fulfilling their obligation to the group.

There is no exchange of commodities between the individual members of this group. Clothing, shoes, furniture, and any other articles of necessity are collected wherever available, but once obtained they become the property of the group and subject to requisition by any member needing them. Such being the basis of operation, there is no need for any scrip or medium of exchange.

As already stated, each local unit is in many respects independent. Where group action or representation is necessary the county council of the association acts. Supplies such as gasoline and motor oil coming into the central organization are distributed among the locals on a pro-rata basis.

While there is no regularly established employment office, the central organization or any local will act as such. Each new member is required to register his occupation as he enters, and the organization is therefore in a position to supply immediately nearly any kind of labor desired. In such cases the man, qualified for the work, whose needs and responsibilities are greatest is given the preference. In such cases the man sets his own scale of pay; the association has no voice in the matter.

On jobs, however, for which the association contracts on an exchange basis, the labor time of the men is figured at the highest current rate (i. e., the union scale), as the association does not desire to lower the standards of wages or working conditions in the community.

As a large proportion of the present locals were started before the formation of the central association, each operated for a time as an independent organization, and the methods and practices adopted were in many cases continued after the federation took place. The result is that there is some variation from local to local, especially in the labor requirements imposed upon the members and in the procedure for the distribution of the supplies. Again, as even at present there is practical autonomy of the units, the progress made by the various units depends almost entirely on the energy and initiative of the members and leaders of the individual local.

Since it is in the locals that the practical relief work is being carried on it has been thought advisable to describe the methods, operation, and achievements of some of the older and more advanced locals.

Local Unit No. 1

LOCAL UNIT No. 1 is situated in Compton, and as already stated is the oldest of the units in Los Angeles County. It has some 500 active members, representing practically all the trades and professions.

Services Supplied

This unit has been very successful in the provision of services for its members. It occupies a large 1-story building which was formerly a soap factory but which had stood vacant for several years before coming into the possession of the association, and is managed by a man who carries on his own trucking and moving business in conjunction with the work of the association. The offices are in one corner and back of them is the kitchen where the working members (from 100 to 150 each day) are given their noonday meal. The supply warehouse occupies the rear left of the building and here are huge bins, wire-partitioned compartments, refrigerator boxes to hold perishables and fish—all built from salvaged lumber and materials by the members. This warehouse serves also as a district distributing center and it is no unusual thing for it to handle as many as 100 tons of produce in a day. "Contact men" are busy scouring the countryside and city for supplies which may be secured for labor. Most of the truck farming in the Compton section is carried on by Japanese and Chinese farmers. Considerable success has been attained by the association in obtaining from them contracts by which the men assist in preparing the fields, in digging the irrigation ditches necessary in the farming of this section, and in cultivating and harvesting the crops. For their labor they receive the unsalable produce (culls, seconds, etc.) and perhaps a certain percentage of the best grade.

Such produce, when obtained, is brought to the warehouse where some of the older men who are not physically able to work in the fields pick it over and clean it for issue to the families. At the time of the agent's visit 10 or 15 of these men were sorting a consignment of many cases of partially spoiled apples sent to the unit by the local food administration office, salvaging and washing the good fruit. The spoiled fruit was to be used to make vinegar.

Across the building several men were repairing pieces of furniture which would then be sent to the furniture warehouse of the association several blocks away. A balcony was being built on which will be installed a short-wave radio set which will bring Compton into the association's chain of stations. At the right of the building at the front members were lining up to receive flour.

A block or two away, on land whose use is donated by the railroad company, a gasoline filling station has been erected from brick salvaged on a wrecking job and here a 10,000-gallon tank has been sunk. At this station are issued the gasoline and oil used in the transportation trucks (the amount used has run as high as 300 gallons a day at the height of the harvest season) as well as that issued, in

very limited amounts, for the personal conveyance of the workers from home to the office. This gasoline is obtained partly from donations, partly by purchases from the "petty fund" of the unit, and partly from the local food administration. This station serves no patrons outside the association.

At other points are the milk station where milk is issued at 3 o'clock every day, the furniture warehouse, and the department of which the unit is especially proud—the sewing department. In the last-named department the slogan of the association—utilization of all waste—is carried out to the letter.

From a local upholstery shop are received scraps and waste pieces of tapestry, denim, and other materials. One woman cuts these into blocks, shearing off all the jagged ends, another stitches them together, forming the top for a quilt. Other heavy material is used for the lining and as the two thicknesses together are sufficiently heavy for use in this climate they are quilted on a frame by other women and the result is an attractive piece of bedding. These quilts and the work shirts manufactured here are premium pieces, for which the demand is far greater than the supply. The shirts are made from cement sacks, and from the heavy linen (formerly discarded) used to back up the crude rubber during the manufacture of automobile tires. Under the fingers of the seamstresses of the unit these materials are now being turned into work shirts with excellent wearing qualities.

The towel and coat supply companies send the unit the white coats, used in restaurants and at lunch counters, which have become too shabby for use. These are renovated, where possible, for use by the unit's men who are handling the milk, fish, and other foodstuffs; if a coat is too worn to permit of repair it is cut up into pieces for use in making quilts.

There are many hundreds of garments in stock here—dresses, coats, trousers, a few children's clothes, caps, hats, etc.—all neatly piled in stacks or hung on racks. All of these have been fumigated, cleaned, mended and pressed, and are now available for issue as needed.

In connection with this department is a shoe-repair shop which shows considerable ingenuity in the materials it has been able to use in the repair work. Lacking shoe leather, it obtains from industrial establishments the worn belting from their machinery.

Other services available through the unit are barber service, automobile repair (though available to members for personal cars only after the repair of the business vehicles has been taken care of), fuel supply, and medical and social service.

The constructive part being played by the organization in caring for cases of distress, the burdens of which would otherwise have fallen upon the city, has been recognized by the officials and the business and professional men of Compton. The local physicians have agreed to treat free all the cases sent to them by the unit. It is understood that the patient will be referred to the physician he had in the days when he was able to pay for service; if he had never had a regular physician the doctor next in line in the alphabetical list is selected. During the short time the bureau's agent was at this unit several cases were attended to. One of these was a young woman (whose husband was unemployed) expecting her second child. The woman in charge of the unit's social-service and health-service work—a calm, motherly woman with grown children of her own—made arrangements for a

physician, for an ambulance when needed, and for an outfit of baby clothes when the mother was ready to leave the hospital.

This woman employee is also doing considerable work in the homes of the members and even in those outside the membership which are referred to her by their friends or neighbors. She states that one of the big problems they have had to meet in childbirth cases has been that through pride the parents have put off coming to the association as long as they could—too long in some cases—with the result of an extreme prenatal undernourishment of the child which has seriously handicapped it.

Procedure for Drawing Supplies

This unit rigorously enforces the principle of the association, that "he who works not eats not." The card carried by each member shows in parallel columns the amount of food supplies drawn and the amount of labor performed each day. This is an instant and automatic check on the slackers. Although required to donate only two days' work, each man not otherwise employed is expected to report at the office every day.

As far as possible the training and aptitude of the man are taken into consideration in assigning the work. Certain members have permanent assignments. Others go from job to job, doing whatever is at hand to be done.

In the early days of the association it frequently happened that members would put in an appearance after the field and other work gangs had been made up for the day, remark innocently that it was too bad they had arrived after the day's arrangements had been made, and return home feeling that they had done all that could be required, but expecting to draw their rations like all the others. This situation has been met by the obtaining of a wood lot where salvaged logs and wood, of whatever kind, is cut up into fuel wood. This is reserved as sort of a "knitting job." Anyone not otherwise assigned is sent here and it is never too late in the day to begin and to put in eight hours' work. At the time of the agent's visit several men were engaged in setting up a saw run by motor, with which to cut the enormous pile of wood salvaged from a ship that had burned in the harbor.

Supplies of vegetables and other foodstuffs can be obtained on presentation of the card mentioned above. For other supplies such as clothing, shoes, furniture, etc., an order must be obtained from the office. When the furniture department was located in the main building those who happened to be on the spot when a piece of furniture arrived would immediately put in a request for it, although it was quite possible that there were many others in the organization whose need was greater. The furniture department was therefore removed to a location several blocks away, and the pieces received never come into the main building but go directly to the warehouse. The result of this has been that requests are received generally only when and for pieces for which there is genuine need. However, to make sure of the latter, all requests of this sort are investigated. The association recognizes that its membership has not by any means attained the ideal state of true unselfishness, and it therefore has several members who act as investigators to see that the home conditions and need are

as represented. This is done to prevent exploitation of the unit and to prevent worthy members from being thus deprived of what they really need. If the need appears to be genuine a requisition (made out in duplicate) is issued, and this the member presents to the custodian of the furniture warehouse and receives the article specified.

Amount of Commodities Handled

Records for each day, week, and month show in pounds the receipts of each kind of edible produce (bread, meat, dairy produce, etc.) and of nonedibles. In tabular form is shown for each department the number of men engaged, the hours of labor put in, and any explanatory comments deemed necessary. The report of this unit for the week February 5-11, 1933, showed that the receipts of produce (broccoli, cabbage, carrots, cauliflower, celery, green and dried onions, oranges, mustard greens, parsnips, radishes, turnips, spinach, and other vegetables) totaled 52,918 pounds. Other food received that week included 3,073 pounds of bread, 1,832 pounds of meat, fish, and soup bones, 26,320 pounds of dairy products (milk, cottage cheese, and cream cheese), 10 pounds of tobacco, 48 pounds of canned milk, and 4 pounds of coffee. The last item represents one of the problems as yet unsolved by the unit—how to provide the staple groceries such as sugar, salt, lard, coffee, butter, etc. The \$10,000 appropriation (mentioned earlier in this article) made by Los Angeles County will, it is expected, enable the provision of some of these articles, but as yet no supplies have been received by the unit from this source. Up to the present, unless the member has been able to supply these commodities for himself, he has had to do without them.

Some idea of the activity of this unit is given by the fact that its operating report for February 5-11 showed that a daily average of 253 members together put in an average of 1,679 labor hours per day every day that week. Among the things accomplished were 100 hair cuts given, 41 carpentry jobs completed, 23 automobile-repair jobs done, 821 noonday lunches served, more than 21,000 pounds of milk collected and distributed, 65 medical and social cases handled, 83 pairs of shoes repaired, 62 loads of wood cut (57 loads delivered to families), and 485 "contacts" made for additional work to be done. In that one week 554 families (2,324 persons) received assistance of some kind through this unit.

Funds

Until March 1, 1933, the policy in this unit as regards outside paid employment had been that what each man earned in this way belonged to him. This was changed at a meeting of the members on February 28. At that meeting it was decided that a man sent to an outside paid job should have the option of paying in to the association 10 per cent of all his earnings on that job and continuing to hold his ration card, or of retaining all his earnings and forfeiting his ration card during the period of his employment. On short jobs of a few hours' duration men are to be assigned from the roll in rotation, but all earnings go into the unit's funds.

This new procedure, it is expected, will not only correct a situation that has been abused by some, but will result in swelling the cash funds of the unit and in easing some of the difficulties heretofore experienced because of the lack of money.

No cash is handled by the officers of the association. By an arrangement with one of the local banks all income is turned over to it and each check drawn upon these funds contains space for an itemization of the purposes for which drawn; it must bear the manager's signature and be countersigned by a designated official of the bank. This procedure acts as a check on any misuse of funds.

This unit has abolished the regular membership meetings. Meetings are held only when some definite business is to be transacted. To provide a medium of expression and information not only for the members but for the general public of Compton, a monthly paper has been started whose first issue appeared in February, 1933. The typesetting is done in the trade classes of Compton Junior College.

Local Unit No. 3

THIS local, situated in Huntington Park, a suburb of Los Angeles, is on a somewhat different basis from the others visited, since it works in conjunction with the Salvation Army, the Huntington Park Social Welfare Association, and the local Red Cross chapter. All of these associations are under the same roof as the Unemployed Cooperative Relief Association unit.

Local No. 3 operates very simply. Its office force consists of three persons who handle the registrations, work orders, and general records for the membership of some 2,000 persons. Each new member fills out a card showing his name, address, physical condition, age, citizenship status, dependents, what languages he speaks, period unemployed, race or color, trade or profession, and experience therein, what work he is willing to accept, and the extent of his need. Card indexes made therefrom list the men by occupation.

Each member is required to give 10 hours' work per week to the association. For each member a current record card is made showing by days the number of hours actually worked for the unit. Each time any supplies are drawn by him a notation is made, and if the required labor has not been performed no further supplies are issued to him until the labor time is made up.

The association runs a fruit and vegetable commissary and a kitchen in which the members who are working for the association are fed at noon.

During the month of January, the report of the unit shows that it received 171,435 pounds of vegetables and fruit for distribution; for this 2,299 man-days of labor of 8 hours each were performed. These supplies were distributed to 3,116 families, having a total of 11,215 persons. In addition 2,192 meals were served on the premises.

On the premises, but under the direction of the Salvation Army, are a barber shop, shoe-repair shop, and bakery. There is also a sewing room, under the direction of the Red Cross; in this room the women of the unit clean and renovate the clothing brought in and make garments from materials furnished by the Red Cross. Orders for Red Cross flour are also issued by its office in the building, and are filled at a counter near the commissary. The Social Welfare Association uses its funds to supply staple groceries. All of the labor used in the operation of these various departments is supplied by the Unemployed Cooperative Relief Association.

The issue of supplies is regulated in the following way: To obtain bread the member goes to the Red Cross office and obtains an order

entitling him to from one to several sacks of flour per month (depending on the number of his dependents). This he may use to make his own bread at home or he may turn the flour in at the bakery in the building, receiving in exchange a card entitling him to as many loaves of bread as the supply of flour he brought in will make. As he obtains each loaf a number is punched out on the card. Persons obtaining staple groceries from the welfare association receive an order from that office for an amount varying according to their need; the store of supplies available, however, varies considerably from day to day, as supplies can be bought only as the association has funds with which to purchase them. For barber service and shoe-repair work application is made to the Salvation Army representative on the premises.

The proceeds of any paid employment secured for a member by the unemployed relief unit belong to the member. It is the practice to send the men out in rotation as requests for labor are received, but in case of extreme need a man is sometimes sent in advance of his turn. Generally, the manager states, it requires from three to four weeks after a new member registers before he can expect to be eligible for a work order. The situation has recently been somewhat improved by the work made available on flood control, park work, and other projects through the Reconstruction Finance Corporation funds; the men on the register are being furnished, in turn, 10 days' work each.

Local Unit No. 9

THIS city local, as its number indicates, was among the earliest units to be formed. The report of its manager for the month of January, 1933, shows that on the last day of the month there were 1,164 members registered, representing 4,907 persons, or practically double the number at the middle of November, 1932. This local is housed in a large building, formerly a garage, in which all its activities are carried on.

The local operates not only a commissary from which food is issued to the families of members for preparation and consumption at home, but also a kitchen from which meals are served to the single members and to the members (married and single) who have been performing their required service for the organization during the day. Married people who on any day have been performing part of the two days' service required each week have the option of obtaining their meals that day at the kitchen or of drawing out their food ration to be eaten at home. During January this kitchen served 8,606 meals. Most of the equipment in the kitchen was either donated or loaned to the unit, though some was earned through service. The water and electricity are obtained free from the municipal plants, and the county pays the bill for the gas consumed.

During January 46,804 pounds of food were received at the warehouse of the unit, of which 39,551 pounds were issued to families of members and 6,119 pounds were used in the kitchen.

At the time of the agent's visit the long tables at which the meals are served were covered with walnuts which were being shelled by members of all ages, who were serving their two days in this way. The work is being done for the walnut growers' association, which pays 5 cents for every pound of nut meats, and thus the association is obtaining needed funds.

At one corner carpenter members were busy constructing a balcony, and steps leading thereto, where a sewing and repair department will be fitted up, in which the clothing received will be cleaned and repaired for use, after which it will be taken to the clothing department for issue to members needing it. The latter department has on hand many pairs of donated shoes most of which need some repairing to make them serviceable. The agents of the local are now negotiating with a local cobbler to do the work, furnishing the needed materials, in return for a building-construction job to be done for him. During January the unit received for salvage 110 pairs of shoes, 120 men's and women's suits, etc., and 300 miscellaneous articles of clothing.

One section of the building which is partitioned off is used as a storage and repair garage for the many trucks which, or the use of which, the unit has been able to obtain. This unit has been especially successful in making "contacts" in the citrus-fruit section and through exchange of service has been able to obtain many tons of cull oranges, perfectly good but unsalable and which would otherwise have gone to waste. The unit has been unable to use all of this fruit in its own group, and it has "swapped" with some of the other units for their surpluses of other articles.

This local and Local No. 26 are the joint owners of a bakery (located at the front of the premises of Local No. 9) which is now baking for 19 units in the city. On the day of the agent's visit this bakery had turned out 1,700 loaves of bread. Part of the bakery equipment has been donated, part bought with labor, and part is rented. The oven has been loaned by its inventor and manufacturer, who, business being poor and he having become greatly interested in what the association is doing, organized the bakery and has given his full time to it as superintendent for four months. Under his direction 12 or 14 of the members, who are bakers by trade, alternate in giving their two days (some considerably more, voluntarily) per week. The superintendent paid tribute to the conscientious and expert work of these men. "They couldn't work better if they were getting \$12 a day."

Although effort has been made to provide housing by the labor-exchange method, the leaders of the unit confess they have had little success thus far in winning over the owners of vacant property in the locality to their proposition—renovation in exchange for a lease.

The local tries to keep some 20 to 30 men acting as "contact agents," scouring the city and country for opportunities to perform labor in return for goods of various kinds. At present they are interviewing the farmers for opportunities in connection with the preparation of fields, spring planting, etc. In computing the value of the services furnished by the unit, of whatever sort, the current scale is taken as the basis of computation, as the association wishes to avoid any undercutting of standards. Thus on common-labor jobs the association rate of computation on exchange work is 40 cents an hour although plenty of laborers could be hired (for cash) in the vicinity for as low as 25 cents an hour.

Each member reporting for his required service is given a work slip bearing his name, his membership number, the number of his dependents, and the work to which he is assigned for the day. Possession of this card entitles him to take his meals that day at the kitchen of the unit. If he draws other supplies, such as shoes, clothing, etc., notation of the articles so drawn is made on the back of the slip. Once a week each household is entitled to draw a quantity (depending

on the size of the household) of the staple groceries being obtained through the use of the city grant.

For each member a monthly record, by days, is kept showing the amount of milk, bread, meat, vegetables, etc., drawn by him; it also shows the number of days worked.

Local Unit No. 33

THIS is one of the newer units. Located in Hollywood across the street from the Goldwyn and United Artists motion-picture studios as it is, some 80 per cent of its members are persons formerly connected in some capacity (but mainly as technicians) with the motion-picture industry. Curiously enough, however, its membership list of several thousands includes no actors.

The unit maintains as yet few services; these include a vegetable and grocery commissary, a barber shop, an art department, and a kitchen in which the men at work for the organization receive their noonday meal. The 12 or 15 persons who work full time in the unit receive three meals a day. The kitchen served 3,487 meals in February, 1933.

During the same month this unit issued to 1,142 families (with 3,661 family members) foodstuffs amounting to 37,295 pounds, in addition to 6,000 pound loaves of bread.

At the time of the agent's visit a number of artist members were busy in the art department making garden markers for which an order had been received.

This local requires each member to work for the organization 2 days of 8 hours each week. A simple record card showing in parallel columns for each week the number of days worked and the days on which a food ration has been drawn enables the unit to check on this point. Unlike the other units visited, this unit has found it easier to exchange labor for staple groceries than for vegetables.

The unit for a while maintained an employment service in connection with the labor department but discontinued it when the present manager took office. Under the present procedure no attempt is made to find employment for the members but any requests for paid labor received at the office are given attention and each man receiving a paid job in this way is expected to turn over his first two days' pay to the unit.

This unit has had considerable assistance, both financially and in the way of advice, from a local family welfare organization, the Assistance League of Southern California.

Cooperative Exchanges

THERE are several organizations operating in Los Angeles which fall in the class of the cooperative exchanges. These are nonstock associations which declare themselves to be "nonpolitical, nonsectarian, and nonprofit organizations to enable everyone to use his talents and skill to his material advantage." Four such organizations were covered in this study—the American Unit, Bellamy Cooperative Exchange, Los Angeles Cooperative Exchange, and New Era Cooperative Exchange.² The purpose of all of these is to facilitate the exchange of commodities and of services between members.

² These are not cooperative associations as ordinarily understood but are rather on the order of business men's associations for the promotion of business.

The associations range in size from about 150 to 5,600 members. All but the American Unit require the payment of a membership fee, ranging from \$1 in the Bellamy and Los Angeles exchanges to \$2.50 in the New Era; the Bellamy Exchange also requires dues of 20 cents per month.

The use of scrip in payment for labor is forbidden by the California law, but as some medium of exchange is necessary in the transactions these associations have adopted a system of transfer of credits. For each transaction a form ³ resembling a bank check is filled out, crediting one party and debiting the other party. The amount is entered also, by the exchange office, on its books and on the pass books of the members involved.

To cover the cost of this bookkeeping and of locating new members and services the associations all make a charge varying from 1 per cent in the Bellamy to 10 per cent in the Los Angeles and New Era Exchanges. The Bellamy Exchange requires that its commission be paid in cash; the American Unit accepts its 2½ per cent commission in credits; and the Los Angeles and New Era associations take half in cash and half in credits.

The exchanges warn their members that they do not guarantee to supply any particular services on demand. They will, however, take the application and fill it as soon as possible. A list of members and services is available and it is up to the individual member to examine it for the services or commodities he can use. The American Unit does, however, have what it calls its "gold certificate," representing "certified credits." The association "guarantees the purchasing power of its certified credits for the purchase of merchandise manufactured or produced in the United States. In case the payee hereof can not purchase such merchandise the American Unit, upon request, will procure and sell to the payee hereof said merchandise or other merchandise of equal value." The New Era has a similar certificate which it calls a "certified trading order."

The Bellamy Exchange is the only one of the associations studied which makes provision for the redemption of its credits in cash. The others all provide that credits shall be redeemable only in goods or services, and the only guaranty is the good faith of the association and of the members. Should any of these other three associations fail or go out of business, the last holder of the credit would be left with it on his hands.

All of the associations pay their employees in credits only.

These exchange associations have recently been the subject of complaint by certain members who took the matter before the State labor commissioner, charging that they were unable to make use of their credits. The burden of complaint of most of these was that the most important item of the budget, food, is not included in the services offered by any of these exchanges in Los Angeles, except occasionally and in very limited quantities, although the Los Angeles Exchange does operate a restaurant. However, as above noted, none of the organizations guarantees that the member will be able to obtain any particular service or commodity. Although the commissioner investigated the exchanges both as to this charge and as to whether they were violating either the wage-payment or employment-agency laws,

³ Called variously "credit transfer," "voucher," "exchange check," etc.

no action was taken as the result of the investigation. The commissioner states, in a recent letter to this bureau, that his office will continue its supervision to insure that all the promises of the associations to their members are kept.

In order to show exactly how the exchange system is being worked out in the Los Angeles district a detailed description is given below of the Los Angeles Cooperative Exchange, which is the oldest and largest of the exchanges in this city. As regards the other associations only the characteristic features are described and the respects in which they vary from the Los Angeles Exchange are noted.

Los Angeles Cooperative Exchange

THE idea on which the Los Angeles Cooperative Exchange is based was conceived some 10 years ago when Mrs. Bessie Ball Mays, wishing to enter her daughter in a certain private school in Los Angeles but lacking funds because of the slump in real estate, the business in which she was engaged, worked out an arrangement with the principal of the school. The school owed a painting bill which it could not pay, but Mrs. Mays had a considerable supply of paint which the painter could use. So she made over the paint to him and with the credit slip received from him therefor paid for the tuition of her daughter. No money changed hands but the bill owed by the school was met, the painter received the amount of his bill in paint, and the young lady's schooling was paid for.

This exchange idea was then carried on in an experimental way in a very limited group consisting of Mrs. Mays and a few friends in professional lines (an artist, a dentist, a lawyer, and one or two others). The group gradually expanded until it grew to fairly considerable proportions. It labored under the disadvantage, however, that there was no one who could give the business the supervision it needed, so operations were suspended until August, 1931. By that time the need for some such system of exchange of services had become apparent, an accountant offered his services to the group, and the exchange idea was put into operation again.

As the public became more acquainted with the purpose of the organization, more and more persons joined, especially those of the professional classes. Since the fall of 1932 the membership has grown from 1,800 to 5,600.

Form of Organization

The Exchange is not incorporated. The organization has been run under the direction of five trustees who are responsible for its management. The heads of the various departments of the Exchange—contact, supply, art, store, accounting, etc.—have been under the supervision of the trustees.

A new arrangement has, however, just been effected. Under it, while the trustees remain in office, the actual carrying on of the business will be in the hands of a business manager and a board of management consisting of the heads of the departments. Matters of policy will be outlined by this management committee, submitted to the judgment of the whole group of Exchange employees at their regular Saturday afternoon meeting, and voted upon finally by the general meeting of members, held every Monday evening.

Membership.—There have been no restrictions whatever on membership. Any person is eligible to join, upon payment of a fee of \$1 and signing the following agreement:

It is specifically understood and agreed that in all transactions with the Los Angeles Cooperative Exchange, in the conveyance or selling of any property or interest to it, in the performance of any labor or services rendered for it or at its west, any form or manner of labor or services at any place, and for any purpose, son or corporation, or upon any structure or work, the seller, laborer, or other son granting to or performing any service will accept in exchange for such labor or service the credits of the Exchange with all and subject to all of conditions thereof, and the undersigned does hereby agree, and by signing this agreement doth waive any and all liens that he or she may have, and any and all rights to demand in any other manner or form and does agree to accept as payment in full and as the exclusive method of payment the said credits unless it is otherwise stipulated and agreed in writing signed by the Exchange under proper authority.

It is further agreed that the Exchange is not to be held responsible for verbal statements.

Employees.—Until February 18, 1933, the employees of the Exchange worked on a salary basis, being paid entirely in credits of the association. At that time, however, because of the fact that the overhead expense was much too high and an operating deficit had been incurred, the salaries were withdrawn and a new plan was adopted. Under this new plan the employees will work without pay, but if at the end of the month the books show a surplus that surplus will be divided among them, each one receiving his share in exchange credits.

Each employee will sign a waiver of his right to a regular salary until such time as the financial condition of the fund enables the resumption of salaries.

This new arrangement is expected to eliminate one source of dissatisfaction among the members—that the operating force, being on the spot and having drawing accounts, has had the first choice of any commodities coming into stock. It will also enable the association to appeal to the members to bring down their charges, as it is known that some are asking rates which are out of line with present-day rates and with those asked by others.

The association has always been under the disadvantage that since it can not fill all its workers' needs through the Exchange and since it pays no cash salaries, the workers must always be on the watch for paid outside employment. Thus it can never be sure from day to day just what employees will be on hand. This also means that the Exchange must utilize those who volunteer, and these may not always be the most desirable type for the work to be done nor the most efficient on the job.

It is expected and desired that the new basis of remuneration will result in a shrinkage of the force, as it is acknowledged that the office is overmanned.

Basis of Operation of Exchange

All exchanges, whether of services or of goods, must be arranged for through the office of the organization, and it is the rule of the association that both parties to a transaction must be members.

Each member of the Exchange is provided with a pass book somewhat like those issued by banks. On the left-hand page is entered the value of any commodities he may have drawn out or of services rendered to him; on the right-hand page are entered the credits for commodities brought in by him to the Exchange or labor performed.

The exchanges are effected through the medium of "credit transfers" somewhat resembling bank checks. These transfers, redeemable only in services or goods, are nonnegotiable, and are transferable only on the books of the Exchange. The association has a rule that such transfers must be turned in to the association within 30 days after issuance. This does not mean that the association would refuse to honor such credits after 30 days. The purpose of the rule is to induce the recipient of the transfer to bring his credits in to be entered on the books immediately instead of holding them until he gets ready to draw upon them.

The credit portion of each transaction is subject to a 10 per cent charge, of which 5 per cent must be paid in cash and 5 per cent is charged against the member's credit account. Each member must supply himself with stamps (issued in various denominations) purchased for cash from the Exchange. These he affixes, in the required amount, to the credit transfer in payment of the cash charge made by the Exchange; the other 5 per cent is made on the books when the credit transfer is turned in to the association.

The cash requirement was found necessary to enable the association to pay for those commodities and services for which it must pay cash.

For minor purchases made at the association's stores members are urged to provide themselves with merchandise cards. These are charged to the member's account when bought; and the amount of each purchase is punched on the card as made, until the full face value of the card has been used.

The Exchange's commission is collected only on the credit part of any transaction. Thus if service is rendered on the basis of half cash, half credit, the association receives no remuneration for the cash involved. Its commission is imposed only to cover the cost of the bookkeeping and other service involved in keeping track of the credit account of the member; cash arrangements, of course, entail no such service.

During the 17 months' operations of the Exchange a credit business amounting to \$26,000 has been done. It is probable that were the cash business to be included also the amount would be doubled.

Services.—In an individual instance the system would work as follows: A member performs service or brings in goods to the association valued at \$50. For this he receives credit on the books of the association and on his pass book. Suppose a few days later he requires the services of a nurse. He calls the Exchange and is furnished the names and addresses of several nurses. From that point onward the transaction becomes a matter of individual bargaining between the parties. The prospective employer talks over the conditions with the persons whose names have been furnished him and hires the one whose terms suit him best. The nurse agrees to work for, say, \$25 a week, \$10 of which is to be paid in cash and \$15 in credits. At the end of the week the employer pays the \$10 in money and fills out in the name of the nurse a credit transfer, crediting \$15 to the account of the latter and debiting his own account \$15 plus 5 per cent of that amount (to cover the credit half of the 10 per cent commission), and affixes in the space provided 75 cents in stamps (the cash half of the commission). The employee is also interested in making sure that

the stamps are affixed, as no credit transfer is honored unless bearing the stamps. As a result of the transaction, the credit account of the employer (\$50) is reduced by \$15.75, while that of the employee is increased by \$15.

In one case a woman member wanted her house painted. After talking to several painters whose names had been supplied her, she came to terms with one who agreed to do the job for \$150 including the paint. He was unable to buy the paint himself, lacking the cash, but was able to arrange for her 4 months' credit with a paint dealer. The paint cost \$50. Of the remaining \$100 he agreed to take \$75 in Exchange credits and only \$25 in cash. On the transaction the Exchange received \$2.50 as commission.

As already noted, the ability of the parties to bargain plays a considerable part in the satisfaction or value received for the credits of the Exchange. According to an official of the Exchange, there have been instances in which the services have been set at such a high rate as practically to nullify the value of the credits. Thus, the person or firm with whom the transaction was made might charge \$50 (\$25 cash, \$25 credits) for work that could have been obtained elsewhere for \$25 had the client "shopped around." In such a case it is evident that no value whatever would be obtained for the \$25 in credits.

Commodities.—A member bringing in, say, a chair, receives, according to the printed statement of the Exchange, "a fair valuation" in credits on the books of the association. It seems to be the actual practice, however, that the member receives what he asks for the commodity. On all articles thus brought in there is an average write-up in price of 25 per cent, to cover the cost of invoicing, handling, and transfer. In order to obviate these charges the association encourages direct trading of articles between the members wherever possible, as in that way the Exchange never actually handles the article; its only evidence of the barter is the credit transfer on which the 10 per cent commission is collected.

In the case of commodities brought in to the association there is often no immediate turnover or exchange. It may be some time before there is a call for the article brought in, and therein may lie a possible danger to the success of the Exchange. Many of the articles now in stock in the stores are those which would be called for only occasionally, if at all; some are of types whose popularity is long since past. When the Exchange receives them, however, it obligates itself for a definite amount payable immediately in any services or goods available; the commodity which it has accepted may be salable only after considerable delay or not at all. Exchange officials, however, discount the idea of any danger in this respect, saying that it has been the experience in all Exchange projects that anything can be disposed of eventually, provided it is sold for credits or scrip; that the only factor that must be taken into consideration is the lag between the receipt of the article and its disposal.

Services Available Through Exchange

As already stated, the majority of the members are of the professional class, though there are also a certain number of the wage-earning classes, skilled and unskilled. The occupations listed by the Exchange as available are as follows:

Attorney.	Osteopath.	Teacher, vocal:
Architect.	Optometrist.	Singing.
Bookkeeper.	Photographer.	Coaching.
Clerical worker.	Painter.	Sight singing.
Chauffeur.	Paper hanger.	Teacher, language:
Carpenter.	Physician.	French.
Cabinetmaker.	Printer.	German.
Cement contractor.	Plasterer.	Italian.
Chiropractor.	Plumber.	Spanish.
Cook.	Sheet-metal worker.	Teacher, other:
Dentist.	Solicitor.	Accountancy.
Dietician.	Stenographer.	China painting.
Dressmaker.	Typist.	Dramatics.
Electrical worker.	Watchmaker.	Public speaking.
Gardener.	Teacher, instrumental	Speech correction.
Houseworker, general.	music:	Stenography.
Janitor.	Piano.	Water colors.
Mechanic.	Pipe organ.	Dancing, ballroom.
Milliner.	Violin.	
Nurse (trained and practical).	Flute.	
Oculist.	Cello.	
	Fretted instruments.	

Other services available include hemstitching, mimeographing, multi-graphing, and laundry work.

The Exchange does not guarantee to provide any particular service. If the service desired is not immediately available, a note is made of it and the inquirer is notified as soon as it can be obtained. For this purpose the association runs an advertisement in one of the local newspapers daily, stating the services desired which the Exchange can not supply.

Thus one member put in a request for a stamp collection. This could not be supplied immediately, but the advertisement produced the desired collection which the member bought, paying for it in credits. He then took the collection to his landlord (a stamp collector), who gave him in return credit on his rent. In this way, without a cent of money changing hands, the seller disposed of his collection, the stamp collector received what he wanted, and the member's rent was paid.

Notwithstanding the fact that the member specifically agrees to accept remuneration in whatever services or goods may be available, there has been some dissatisfaction on the part of a few who have charged that they were misled or misunderstood just what they could secure in return for their credits. Perhaps the greatest source of dissatisfaction has been that the Exchange has been able to supply comparatively little of that which everyone needs and must have—foodstuffs. In order to encourage the bringing in of foodstuffs the association waives its commission on such articles. It has not, however, been particularly successful in this line as yet. There are plenty of vegetables and fruits available in the surrounding territory, but the Exchange has not as yet been able to solve the problem of transportation of these articles to the city. There have been numerous instances in which the Exchange could have been the recipient of outright gifts of foods; official regulations, however, prevent the association from

accepting gifts, as it is not a charitable institution and as it would receive them only to dispose of them again.

From 175 to 200 persons are being housed through the efforts of agents of the Exchange who have made arrangements with the landlords or owners to accept the Exchange credits in payment of the rent.

The Exchange operates an art-goods department handling mainly articles made by the members, a general merchandise store (at which furniture is also handled), and a restaurant which feeds about 300 persons a day. The first two operate on a credit basis.

The restaurant has until recently been selling dinner cards for \$5—\$1.50 cash and \$3.50 in credits. It was found, however, that the cash requirement was too high for the patrons to meet, and a new arrangement has been adopted, tentatively, by which one dollar's worth is punched out and the card is sold for \$4 (\$1 in cash and \$3 in credits). This presents a very nice problem for the restaurant, in that cash must be paid for many of the things it needs and the \$1 cash provides a very small margin with which to buy. The restaurant recently effected an arrangement with a Chinese dealer by which the latter exchanged \$100 worth of meat for \$100 worth of printing furnished through the Exchange. It is now negotiating with a wholesaler for the exchange of \$300 worth of groceries for the same value in labor (papering and painting the wholesaler's business premises).

There is also a sewing room operated by the association where members have dressmaking and millinery work done. The pieces remaining from these operations are utilized by being braided into rugs which are sold in the Exchange stores. The women here work for credits of 50 cents an hour. This department labors under the same difficulty as all the others, that employment here, being for credits only and not for cash, is secondary only, the members taking outside paid employment whenever available. The forewoman, therefore, can never be sure of having any certain number of workers at any time.

Another service rendered by the Exchange is free life-insurance protection for six months. It has an agreement with a life-insurance company by which, upon the Exchange waiving its fee for securing the business, each member receives a \$2,000 policy on which no premium is required for the first six months' protection. At the end of that time the policy can be continued upon the member's beginning to pay the premiums required. Should the member die during the first six months his family receives \$1,000.

The association has before it the problem of meeting the regular operating expenses, including the cost of certain necessary work which produces no goods nor exchangeable services. It is generally recognized that the issuance of credits to cover such expenses is unsound and amounts to a depreciation of the scrip outstanding. In order to meet this situation the Exchange plans the establishment of a guaranty fund from which such expenses could be met. It is hoped to obtain such funds by gifts from persons interested in the work of the Exchange and able to contribute.

Bellamy Cooperative Exchange

THIS exchange, located in one of the poorer sections of the city, is the smallest of the exchange organizations studied, having only about 150 members.

Each member is required to pay a registration fee of \$1, and 20 cents in dues each month.

The plan of operation of this exchange differs from that of the others in that definite provision is made for redemption of the "vouchers" in cash after 24 transactions.

As each transaction between members is completed a stamp to the amount of 5 per cent of the value involved must be affixed on the back of the voucher in the space provided for it and must be canceled by the member's signature and membership number. These stamps are purchased with cash at the office of the Exchange. After 24 such transactions the voucher is returned to the Exchange for redemption. Thus on a voucher with a face value of \$1 there would, at the end of 24 exchanges, have been paid \$1.20 in cash. Of this the Exchange retains 20 cents (representing 1 per cent) for its services, and the dollar is used for redemption purposes.

The employees of the association are paid entirely in credits. Although members are encouraged to bring in for exchange any usable articles, very little stock was on hand at the time of the agent's visit. The association has been able to obtain food only to a limited extent. The services it lists as available to members are the following:

Professional: Architects, chiropractors, dentists, doctors, lawyers, and real estate men.

Arts: Teachers of art, dancing, drama, languages, music, piano, and singing.

Artisans: Auto mechanics, carpenters, decorators, gardeners, laborers, painters, and plumbers.

Sports: Fencing, golf, mountain climbing, riding, and tennis.

General: Apartments, automobile parts, automobile tires, barbers, beauty treatment, building contractors, copyists, dressmaking, dry cleaning, florists, hospitals, hotels, laundry, photography, printing, radios, residences, restaurants, stenography, tailoring, and watch repairing.

New Era Cooperative Exchange

BOTH the main office and the branch office of the New Era Cooperative Exchange are in Hollywood.

The association charges a membership fee of \$2.50. As in the other associations, exchanges of goods or services are permitted only between members, the amount of the transaction being evidenced by an "exchange check." When this check is turned in to be entered on the books of the association, the amount of the check plus 5 per cent is deducted from the credits of the member who issued the check, while the member who receives it must pay to the association 5 per cent in cash. Thus the association receives 10 per cent on each transaction, of which half is in cash and half in credits.

The branch office of the association receives the commodities brought in for exchange, but at the time of the agent's visit there was very little stock on hand. The Bellamy Exchange, already described, was formerly also a branch of this organization.

The association has between 1,100 and 1,200 members, whom the manager describes as being mainly of the professional and high-grade technician classes. The services available, therefore, are chiefly of the luxury type, comparatively few of the articles of prime necessity being available through the Exchange.

The services listed as available include all those listed under the Bellamy Exchange, plus the following:

Professional: Astrologers, chiropodists, dieticians, landscape gardeners, metaphysicians, optometrists, and osteopaths.

Arts: Teachers of sand crafts, and sculpture.

Artisans: Decorators, draftsmen, engineers, roofers, surveyors.

Sports: Bridge, and chess.

General: Awnings, cremation, engraving, instruction in speed writing, insurance, massage, mineographing, "problems sympathetically solved," rejuvenation, shoe repairing, typewriters, undertakers, and vocational advice.

The manager states that a business of about \$1,200 a week is being done through the Exchange.

Employees are paid entirely in credits.

The American Unit

THE American Unit was formed about September, 1932. It differs from the other exchanges in two respects: (1) It receives no commodities for exchange and therefore operates no warehouse nor store, functioning merely as a recording agency and agency for the expansion of the services offered; (2) it handles no cash at all, requiring neither a membership fee nor payment of a cash commission on transactions. It exacts 2½ per cent on the face value of every transaction, as evidenced by the "credit slip," but this is charged merely against the account of the member involved.

The necessary cash expenses of the association are met from a small trust fund.

According to the American Unit Guide, for February 1, 1933, all that is required to become a member is "to accept a T. A. U. credit slip and deposit same to your account or to agree in writing that you will accept T. A. U. credit slips for your merchandise, up to the limit of your ability."

On February 1, 1933, there were listed 774 members, classified into 187 groups. These groups included the following:

Accountants.	Dental laboratories.	Nurses.
Advertising.	Dentists.	Office supplies.
Architects.	Dressmaking.	Optometrists.
Artists.	Druggists (prescriptions).	Orthopedists.
Attorneys.	Electroplating.	Osteopaths.
Automobile service (batteries, bodies and fenders, brakes, storage, painting, repair, tire repair, tops, trailers, wheel alignment, wrecking).	Electrical equipment.	Orchestras.
Barber supplies.	Etching, commercial.	Painting.
Barber shops.	Engineering.	Paper hanging.
Bicycle repair.	Electrolysis.	Photographs.
Beauty service.	Electrotherapy.	Physicians and surgeons.
Blacksmithing.	Engineers, consulting.	Piano tuning.
Books.	Fire extinguishers.	Plumbing.
Bookbinding.	Floor finishers.	Printing.
Burglar alarms.	Florists.	Radio service.
Business counsel.	Flowers, artificial.	Real estate.
Cabinet work.	Foot correction.	Repairs, miscellaneous.
Carpet cleaning.	Funeral directors.	Roofing.
Carpenters.	Furniture.	Schools.
Contractors.	Glass blowing.	Sheet-metal work.
Cards.	Golf, miniature.	Shoe repair.
Chiropodists.	Hairdresser.	Shoe shining.
Chiropractors.	Hospitals.	Stenographers.
Cleaning and dyeing.	Interior decorators.	Surveyors.
Cleaning solvents.	Insurance.	Tailors.
Commercial artists.	Jewelry manufacture and repair.	Tax consultants.
Cosmetic manufacturers.	Jewelry, costume.	Theaters.
Dance halls.	Landscape gardening.	Tile setters.
Detectives.	Laundry, hand.	Tool and die makers.
Dental supplies.	Locksmiths.	Transfer and express.
	Machine shops.	Trucking.
	Massage.	Turkish baths.
	Multigraphing.	Typewriter service.
	Needlework, fancy.	Watch and clock repair.
	Notary public.	Window washing.

In some instances the persons or firms listed accept credits only for labor; any materials or parts furnished must be paid for in cash.

Like all the other exchanges, the American Unit pays its 115 employees entirely in credits. In order to comply with the law against payment of wages in scrip, the association requires each employee to sign the following agreement:

CONTRACT OF EMPLOYMENT

(For the American Unit employee)

I, the person whose name is signed on the reverse side hereof, have solicited employment of, and agree to work for, the American Unit, a California corporation, in any capacity assigned to me, on the terms, for the compensation and with the distinct understanding as follows:

1. That the American Unit is a nonprofit, charitable institution which pays no wages.
2. That all work done or services rendered by me to the American Unit at any time, is and shall be, without compensation, salary, wages, or other remuneration; that I am donating and will continue to donate such work, services and labor to the American Unit free of charge.
3. That this employment may be terminated at any time by either the American Unit or me.
4. That as a mere gratuity to me and not as wages or salary, the American Unit may extend to me credit on its books which I shall be privileged to utilize to the extent of the facilities provided from time to time by the American Unit.
5. I know that the American Unit maintains nothing other than a list of members who, from time to time, will exchange property, labor, and services for credit slips, and that I must share with other members the opportunity to utilize any credit that I may have.
6. I have been distinctly told by officers of the American Unit that neither money, clothing, food, shelter, nor other necessities of life can be obtained in exchange for such extensions of credit as may be gratuitously donated to me by the American Unit, but that such things other than money may possibly, from time to time, be available in limited quantities from other members in exchange for such extensions of credit; that if and when available, I may, at that time, utilize any credit I may have to the extent acceptable by such other members.
7. That my sole object of becoming identified with the American Unit is to provide me an opportunity, if I elect to avail myself thereof, of my share or proportion of whatever may become available from time to time through the facilities provided by the American Unit.
8. That no representations have been made that are not set forth herein and that I have been distinctly told that no officer, agent, or employee of the American Unit has any authority to make any representations, statements, or promises to me appertaining to the subject matter hereof except such as are set forth herein.
9. I agree to abide by the rules, regulations, by-laws, and plan of business of the American Unit as the same may exist from time to time.

One of the officials states that during the period since the association was formed some \$69,000 worth of business has been done through the association.

MARCH 8, 1933.

Organized Unemployed (Inc.), Minneapolis

THE Organized Unemployed (Inc.), of Minneapolis, Minn., was established through the efforts of the Rev. George Mecklenburg, of that city, who hoped to organize a system of effective self-help for the unemployed of the city who were not recipients of charitable relief. These unemployed, who he believed would in many cases go to any length to avoid public relief, were to be helped to help themselves through a system of barter and exchange and the use of scrip.

Papers of incorporation were filed by the Organized Unemployed (Inc.) under the laws of the State of Minnesota on August 26, 1932. The articles of incorporation make no reference to the immediate purposes of the organization or to the means and methods by which these and its general aims are to be attained.

Article 2 of the incorporation papers describes the general nature of the business of this corporation. It reads as follows:

The general nature of the business of this corporation shall be:

To promote the general welfare and education of all the citizens of the United States.

To accept and receive donations and gifts of money, goods, wares, and merchandise.

To own, buy, and sell real and personal property of all kinds and character, including leases or such other interests in real property as may be necessary or legal in the transaction of its business.

To act as agent or broker for others.

To do such other kinds or classes of business as are not inconsistent with the purposes herein enumerated.

Article 6 provides that—

The government of this corporation and the management of its affairs shall be vested in an executive committee of not less than 3 nor more than 50 members, the number to be fixed by the by-laws. Each shall be a member of this corporation and elected to membership in the board by the members at their annual meeting each year and shall hold office for the term of one year or until his successor is elected and qualified.

Up to the present time no constitution nor by-laws have been drawn up by the corporation. A central committee, consisting of the general chairman, secretary-treasurer, and business manager of the organization, the chairmen of the 13 city wards, and the managers of the various departments and committees, has been loosely organized, but no definite powers have been delegated to this body. The following is a list of the present membership of the central committee: General chairman, secretary, business manager, contact and solicitation department manager, radio publicity chairman, news publicity manager, printing and supplies manager, social service and relief manager, home owners and personal problems department manager, auditing and accounting department manager, farm contact and produce supply manager, clerk, labor assigner, warehouse manager, transportation manager, wood-cutting superintendent, warehouse selection chairman, barter and exchange department manager, bread and milk supply chairman, auto repair and machinery department manager, gas and oil committee chairman, clothing manufacturing department manager, central storehouse manager, canning department chairman, meat department manager, cafeteria committee chairman, manager of cafeteria, shoe repairing department manager, central labor exchange and made-work department.

manager, receiving department manager, legal committee chairman, medical committee chairman, dental committee chairman, educational committee chairman, organization and nominations committee chairman, State planning committee chairman, farm project chairman, dormitory and club rooms committee chairman, chairmen of 12 guilds, personnel department manager, and 13 ward managers—a total of 64 members.

This central committee of the organization, consisting of 60-odd members, must not be confused with the "executive committee of not less than 3 nor more than 50," as provided in article 6 quoted above. Very few, if any, members of the central committee, with the exception of Doctor Mecklenburg, Earl Lenth, and Max L. Keith (the former temporary chairman of the organization but who is no longer actively associated with it) are actual members of the corporation. The meetings of the central committee of the Organized Unemployed (Inc.), which take place regularly every Saturday afternoon, are open to the general public. A careful examination of all the minutes of this committee discloses no effective participation of the central committee in the actual management of the affairs of the organization.

Doctor Mecklenburg states that no by-laws of the corporation were drawn up for fear the unreliable element among the unemployed would obtain control of the organization. Almost from the beginning he received moral and financial support from a group of business people who agreed to supply him with a considerable amount of money (over \$5,000) to help run the organization. The records of the auditing department of the organization disclose the fact that no cash donations or cash transactions are entered in the official books of the organization. These have been handled exclusively by Doctor Mecklenburg.

Membership

ARTICLE 7 of the incorporation papers provides that the regular membership "shall be confined to persons elected to membership by the executive committee, each of whom may become a regular member of this corporation upon the payment of dues in the sum of \$1." The records of the organization do not disclose how many members there are in the corporation proper. Any unemployed person, man or woman, who registers with the organization and who expresses a desire to work with it, is automatically considered a member of the organization. No fees are required for membership. The total registered membership of the organization is given in the statistical data of this report. (See p. 753.)

Launching the Movement

SOME two months prior to incorporation, Doctor Mecklenburg entered upon an active campaign to organize the unemployed, in order (quoting a statement by Mr. Lenth) "to aid the unemployed and needy by stimulating and directing the spirit of self-help in offering work opportunity to as many individuals as possible in order that they may maintain their independence of public and private charity." Assisted by his friends, by the Wesley Methodist Episcopal Church, of which Doctor Mecklenburg is the pastor, and by a considerable following, he proceeded, with the help of posters, newspaper pub-

licity, and radio announcements through his own radio station, to gather around him a large number of unemployed workers enthused by the idea of establishing an organization which might help them secure work. Once launched, the movement grew rapidly. After two or three general meetings of the unemployed, arranged and addressed by Doctor Mecklenburg and some of his associates, it reached proportions where it became necessary to branch out into the separate city wards as a more effective means of reaching the unemployed and spreading the movement. Further mass meetings were held, and the enthusiasm continued to increase. A loose organization was established by coordinating the ward activities with the central headquarters temporarily located in Wesley Church. The new organization at once proceeded to act. First, some 3,000 unemployed (men and women) were sent out through the city in a house-to-house canvass to determine the precise number of unemployed in the city of Minneapolis. All who registered were considered members of the organization. It was then decided to send teams of workers out to the neighboring farms to establish contacts with the farmers, so that a system of barter could be arranged whereby the farmers would be supplied with labor or commodities they might need in exchange for farm produce. The high pressure under which this work was accomplished is well described by E. W. Thompson, manager of the farm and wood department of the organization, who at that time was in charge of these activities:

We arranged, at first, to send out 20 men to do the contacting work. We planned to pay them \$2 a day per person. Doctor Mecklenburg offered to pay it personally. He also agreed to buy the gasoline and oil for these men to be used in the contact work. These men went out in teams of two or three, leaving early in the morning and returning late in the evening. Some reported good progress; others were rather discouraged. Nevertheless, the first real day's work, on August 16, resulted in orders for 48 man-days' work. This was primarily general farm work such as milking, silo filling, repairing of farm buildings, picking tomatoes, potatoes, topping onions, picking carrots, etc.

Each contact man was issued an identification card establishing his connection with the Organized Unemployed (Inc.), and later also a special "scrip credit" which specifically stated the amount he earned and entitled him to receive same in produce from the warehouse.

Late in August, the pastor of the church in Brooklyn Center requested the Organized Unemployed (Inc.) to send out a group of workers to repair the roof of the church, finish the gymnasium, plaster and stucco the parsonage, and repair some of the farmers' homes. It amounted to about \$650, involving the work of plasterers, painters, carpenters, and common laborers, who were paid at the rate of from \$1 to \$3.75 per day. This entire job was paid by farm products donated by the farmers to the church. Other church work followed. In addition, two large truck farmers hired about 400 men for picking potatoes, tomatoes, carrots, and topping onions. The work was done on a share basis, and a large quantity of vegetables, particularly potatoes and carrots, was stored in the warehouse, the use of which was donated by the school board of the city of Minneapolis.

While this contact and farm work was carried on, the separate wards organized 17 canning units, chiefly in church kitchens, where the women of the wards volunteered their services, later being paid in scrip for the work done.

Though no official drive for funds was launched either by Doctor Mecklenburg or by the Organized Unemployed, appeals for help were broadcast daily from the Wesley Church radio station and there was a steady flow of donated produce, clothing, shoes, and other items coming into the newly established headquarters of the organization in the old Girls' Vocational High School, the use of which was permitted, rent free, by the school board of the city of Minneapolis.

The exhibitors of the State and county fair donated the entire produce of the exhibits. Army trucks were used in hauling this produce to the city. Some 20,000 sacks were donated by several flour and other companies to hold the pro-

duce. Large quantities of jars were given by the several department stores, and a number of individuals made personal money contributions for the purpose of supplying the organization with trucks, gasoline, oil, and other items which could not be easily secured otherwise.

Immediately after Labor Day the wood department, also managed by Mr. Thompson, started its operations. The first camp was established on the Wickstrom farm some 35 miles away from Minneapolis. The Organized Unemployed members were offered an opportunity of clearing the land on the farm in return for the wood they might get in the process of clearing the land. The men were paid by the organization, at first \$6 and then \$5 for each cord of wood cut and piled on the farm. This camp was established with the help of the State government, which supplied the tents and all the necessary camp equipment, including a rolling kitchen.

The first camp was followed by a series of other wood camps, with the result that in the height of the wood-cutting activity in December, 1931, a maximum of 483 men were engaged simultaneously in cutting wood in 30 different sections around the city of Minneapolis. The pay roll of the wood battalion contained a list of over 700 names, of whom a small number (approximately 95) remained permanently in the camps. The other workers had to be transported daily to and from the camps, involving a considerable expenditure in gas and oil used up by the transportation. By March 1, 1933, a total of \$25,814.02 had been paid out in scrip as wages to the workers directly engaged in the process of cutting wood in the camps. A large amount of wood is still piled in the various camps, and its delivery to the city has been considerably impeded by the lack of cash necessary for the delivery. This in spite of the fact that a minimum of at least four orders per day had to be canceled by the organization because of the shortage of wood at the warehouse.

Present Functional Structure of the Organization

THE organization's pay roll for the week ending February 22, 1933, contains the names of the following departments, which are, with the exception of the warehouse and the wood-cutting battalion, all located in the general headquarters of the organization in the old Girls' Vocational High School Building. These departments are: Accounting, cafeteria, city labor, clothing manufacturing, contact and sales, dormitory, farm contact, farm labor office, general office, barter and exchange, publicity, receiving department, retail (grocery and clothing), sauerkraut, shoe repairing, trucking and transportation, warehouse, wood battalion, building maintenance, and miscellaneous. The manager of each department is appointed either by Doctor Mecklenburg or by Mr. Blamey, the general manager of the organization, who was himself appointed by Doctor Mecklenburg. The head of each department has the right to hire and discharge the employees of his department, though now subject to approval by the executive officers of the organization.

Departmental Functions

IT IS impracticable to describe in any great detail the operations of each department, these being at times rather intricate because of the triple system of exchange used by the organization—scrip, barter,

and cash. Several deals have been consummated by the organization which, in addition to scrip and cash, involved a roundabout process of barter with several dealers. To trace the effect of such a deal on the various departments of the organization would have entailed a greater expenditure of time than was available in the present survey. However, the following brief description of the work of the major departments will indicate the general character of their activities.

Accounting Department

The accounting department was organized early in September to take charge of all the records of the organization, including the issue of scrip money. During the week of February 22, 1933, this department consisted of 1 manager (on the executive pay roll); 1 accountant, 1 timekeeper, and 1 cashier, each receiving \$12 per week; 1 bookkeeper, at \$9 per week; 1 cost accountant (for the clothing department), at \$10 per week; 3 assistant cashiers, at \$6 each per week; and 2 part-time assistant cashiers, at \$3 each a week. It is the duty of this department to prepare the regular monthly financial statements of the organization, covering all its scrip and barter transactions. The cash affairs of the organization are handled by Doctor Mecklenburg himself. The accounting department also keeps records of all the weekly pay rolls, with the exception of the so-called executive pay roll, for which no records are kept by the organization.

The first issue of scrip took place on September 13, 1932, to the amount of \$3,000. Scrip is issued of the following denominations: 5 cents, 10 cents, 50 cents, \$1, \$5, and \$10. It is copyrighted and protected by the seal of the Organized Unemployed (Inc.), and by the signature of Earl Lenth, secretary-treasurer of the organization, who now signs all the scrip. The first issue was signed by Doctor Mecklenburg and later some scrip was signed by Elizabeth Fish, principal of the Girls' Vocational High School.

Cafeteria

The cafeteria was organized about August 15, 1932, and was started on a very small scale, supplying on the average about 30 to 40 meals a day. Through the generosity of a local cafeteria chain organization, which loaned to the Organized Unemployed a complete kitchen outfit, together with all the equipment (valued at about \$6,800) required for the running of a cafeteria, the activities of this department have been greatly increased. The same cafeteria company also supplied the chef for the cafeteria, who is now paid partly in cash by his own employer and partly in scrip by the Organized Unemployed. In addition large quantities of surplus food from the chain restaurants are delivered daily and used in the cafeteria. Because of this expansion the cafeteria was enabled to serve on the average 1,400 meals a day and is now open for service all day from 6 a. m. until 7 p. m. The regular charge for a meal is 10 cents in scrip, although there are extra charges for soup and other items which are not a part of the regular meal. About 40 people are employed regularly in the cafeteria department at a wage in scrip ranging from \$1 to \$2 per day. During the week of February 22, the cafeteria department had 38 full-time employees, 8 part-time workers, and a total pay roll of \$335.25.

City Labor Department

This department was organized December 7, 1932, and consists of a manager, an assistant to handle all the male applicants for jobs within the city limits, and a woman assistant to handle the female registrants. The entire list of unemployed has been segregated by occupations, with separate guilds organized for the individual major trades or occupations. It is claimed by the department that up to February 25, 1933, 1,350 men were placed on jobs, permanent and otherwise, with total earnings of combined cash and scrip to the amount of \$12,825. In the women's division 250 placements were made, with total earnings of \$570. No charges are made to the workers for these employment services. The city labor department has no set standard of wages. All the cash jobs are turned over by the manager either to an individual worker or to the guild, and it is left entirely to the discretion of the man on the job to make the terms of agreement for the work to be done. In the case of barter deals of services for commodities, the organization makes the agreement and pays the workers in scrip.

The operations of the painters and paper-hanging guild have been described by the chairman of the guild as follows:

There are about 1,100 unemployed listed as painters and paper hangers on the register, many of whom are not at all familiar with the nature of the work involved. The guild consists of about 125 men, of whom about 40 are really active. These are skilled artisans, and the work is as a rule divided among these men only. All earnings, whether in cash or in scrip, go to the individual workers. On the whole, however, there was very little work done by the guild during the winter.

The several other guilds, of which the carpenters and plumbers are the most active, are operating on a basis similar to that described above.

Clothing Department

Clothing operations started with remodeling and reconditioning the large supply of clothing gathered by the organization through solicitation. The department began with 2 foot-power machines and 8 or 9 workers. Later additional power sewing machines, as well as an electric cutting machine, were purchased for scrip. A pressing machine was borrowed, and the organization embarked upon the manufacture of mackinaws for men, women, and children. A small amount of flannel shirting and other goods was purchased for cash, and the department started manufacturing ladies' dresses, men's and women's flannel garments, and men's and boys' shirts. During the week of February 22, 1933, the personnel of this department consisted of 1 manager, 2 cutters, 16 power-machine operators, 5 tailors, and 10 other workers. With the exception of the manager and the two cutters, who are getting \$15 a week, all employees of the department are paid 20 cents an hour for 44 to 46 hours of work per week. The total pay roll for the week referred to was \$227.40.

The clothing department is now undergoing a process of enlargement. Agreements have been made with several outside concerns whereby cloth is to be supplied to the clothing department in exchange for the manufactured goods, which are to be returned to the outside concern and sold on the open market. A local manufacturer has transferred his 70 sewing and other types of machines to the headquarters of the Organized Unemployed. He agreed to supply the organization with the raw materials and the necessary accessories for

the operation in exchange for the manufactured product with which to supply his former customers. This manufacturer is to get preference on his work. The only labor stipulation is that the average daily wage for the workers on these jobs must not fall below \$1.50 in scrip.

Farm Contact and Farm Labor Offices

The nature of the work performed by the farm contact and farm labor departments is described elsewhere in this report. At present the farm contact activities are comparatively slack and the departments are devoting most of their time to the wood-camp operations. During the week ending February 22, 1933, the wood battalion consisted of 141 men, who drew a total wage of \$782.05.

Barter and Exchange

The barter and exchange department was set up to provide an outlet for the furniture or other things and goods the unemployed might want or be compelled to sell or to exchange for things needed. Very little of direct barter is taking place in this department. The manager operates on the principle of first purchasing the things brought for exchange on a scrip basis and then, if desired, offering to sell the things wanted separately, also, of course, for scrip. The activities of this department are not very extensive but it has proved to be very profitable.

Publicity Department

The function of this department is to prepare and deliver to the local press statements concerning the activities of the entire organization. The organization subscribes to a clipping agency, and the newspaper reports are clipped and pasted on the sheets of a large album, together with a collection of photographs depicting the various departmental activities of the organization. This department solicits visitors both through the press and radio talks, and Doctor Mecklenburg himself uses the various channels of publicity at his disposal—the radio station of the Wesley Church, the pulpit, and numerous talks before social and club gatherings. As a result of this extensive publicity work, the organization has recently been literally swamped with requests for information and with local and out-of-town visitors.

To satisfy the numerous requests for information, and at the same time to utilize the favorable publicity for the benefit of the organization, there was prepared for distribution folders containing standardized sets of articles and other materials pertaining to the process of promoting and organizing self-help activities for the unemployed. These folders are offered for sale through the mail and to visitors at the rate of \$1 each. Some 200 were sold during the month of February.

Retail Store (Groceries, Meats, Clothing, Shoes, Dresses, etc.)

The retail store was started on September 5, 1932. At that time large quantities of farm produce were rapidly coming in to the warehouse, and the store had large supplies of vegetables. However, at no time during its operation could the store actually supply all the necessary articles required even for the lowest standard of living. No flour is available except what is donated by the Red Cross. Meat can now be had on the average once or twice a week, in very insufficient

quantities. No sugar has been available since Christmas. At present (March) the supply of farm produce is very low and is not of a very good grade. Potatoes, onions, rutabagas, sauerkraut, and preserved goods are about the only articles available in sufficient quantities and in comparatively good condition. It is stated by the manager of the store that the average Saturday business turnover amounts to between \$500 and \$700. The prices of a few articles are either lower than or equal to outside prices, but for most items the prices are somewhat higher than outside.

The personnel of the retail store consists of 1 manager, 5 grocery clerks, 1 stock man, 3 helpers, 1 janitor, 2 bread-department clerks, 5 clothing clerks, 2 meat-department clerks, and 2 cashiers. The manager receives \$18 and the other employees from \$6 to \$12 a week.

Relations with Other Organizations

SO FAR as it can be ascertained the Organized Unemployed (Inc.) did not invite cooperation from the local relief authorities, employment agencies, or such other organizations as the Minnesota Federation of Churches, community fund, family welfare, or the labor unions. It is not reciprocating with the city relief agencies in their system of confidential clearings in order to avoid duplications of persons receiving aid from several agencies. However, since the Organized Unemployed (Inc.) has been getting a part of the flour donated by the Red Cross, it has been required to clear through the confidential exchange all of its members who become recipients of either the flour or the bread baked therefrom. The Central Labor Union of the city of Minneapolis, representing all of organized labor in the city affiliated with the American Federation of Labor, is in decided opposition to the activities of the Organized Unemployed. When asked for an official statement stating the reasons for this opposition, the executive committee drew up a resolution which was later approved by the entire body of the Central Labor Union. The contents of this resolution are as follows:

Complaints made to the Central Labor Union by several affiliated unions that the Reverend Mecklenburg unemployed relief plan was lowering their scales of wages and consequently their living standards have caused this central body to investigate these grievances.

Investigations made show these complaints are well founded. In fact, the Mecklenburg Organized Unemployed relief plan has no fixed scale of pay and no uniform conditions under which workers are employed.

It is found that the Mecklenburg unemployed relief plan is breaking down wage scales and conditions and lowering living standards to a point where honest toil brings only the reward of the barest existence or even less.

Aggravating this situation is the fact that the scrip issued by the Mecklenburg Organized Unemployed relief plan has in instances been sold at a large discount, evidence disclosing that it has been offered for sale for as little as one-third of its face value.

This offers an opportunity to unscrupulous employers who otherwise would pay wages in cash to buy up the scrip at a heavy discount and use it to pay wages instead of using cash. This tends to further drive down wages and impair working conditions.

It is the function of the trade-union movement not only to maintain wage scales, working conditions, and living standards of the workers, but to seek at every opportunity to raise and improve them.

We find our organizations in their attempt to function toward the goal of these trade-union purposes and ideals hindered and opposed by the policies of the Mecklenburg Organized Unemployed relief plan.

Therefore the Central Labor Union of Minneapolis declares itself opposed to the policies being carried out by the Mecklenburg Organized Unemployed relief plan that are lowering wage scales, making working conditions more arduous, and lowering the standards of living of those who toil.

Assets and Liabilities

STATEMENTS of the resources and liabilities of the Organized Unemployed (Inc.) were prepared by the auditing department of the organization as of the following dates: November 30 and December 31, 1932, and February 22, 1933.

The figures presented in the table below were taken from these reports. The figures are subject to the following explanations:

1. The financial statements were prepared by the auditor of the organization and were not checked or approved by any outside agency.
2. The financial statements do not show the amounts of cash or other donations used by the organization, although the inventory contains all the assets acquired by the Organized Unemployed (Inc.), whether through its own activities or through donations of cash or things.
3. No account of the actual physical assets of the organization could be secured, and the financial reports do not state specifically what methods were used to convert the numerous items to a monetary basis.

However, in the case of wood, which is by far the most important asset of the organization, it was possible to establish a direct connection between the actual amount of wood owned by the organization and the value it placed on it in the financial statement of February 22, 1933. On that day the organization had 2,231 cords on the several camps operated and 314 cords in the warehouse. The maximum price of the highest quality of wood sold by the organization is \$12.75 per cord in scrip. It costs the company a minimum of \$1.25 to deliver a cord of wood from the warehouse to a customer. The maximum value of a cord of wood at the warehouse is therefore \$11.50, and the total maximum value of the wood in the warehouse on February 22, 1933, was \$3,611. It costs the organization a minimum of \$2.25 per cord to deliver the wood from the camps to the warehouse and an additional \$1.25 per cord to saw and handle the wood at the warehouse; these are for direct labor only. The maximum price of the wood at the camps could not, therefore, exceed \$8 per cord retail. Assuming that all the wood in the camps is absolutely first class, the total value of the entire supply on February 22, 1933, could not very well have exceeded \$17,848, and the entire value of the wood in the camps and in the warehouse would thus amount to a maximum of \$21,459. In the financial report of February 22 the value of the wood in the warehouse and in the camps is given as \$24,161.97, or \$2,702.97 higher than the maximum as above compiled.

STATEMENT OF ASSETS AND LIABILITIES

Assets

Item	Nov. 30, 1932	Dec. 31, 1932	Feb. 22, 1933
Inventories:			
Wholesale—			
Sauerkraut.....	\$2,547.45	\$2,742.95	\$1,873.50
Canned goods.....	2,547.80	2,396.80	1,464.53
Produce in warehouse.....	5,867.05	5,143.46	1,532.41
Total.....	10,962.30	10,283.21	4,870.44
Wood production, wholesale—			
In fields.....	4,673.50	14,174.72	23,823.34
At warehouse.....	357.00	127.95	338.63
Deferred costs, or in process.....	1,675.00	4,601.85	4,580.20
Total.....	6,705.50	18,904.52	28,742.17
Clothing production, wholesale—			
Raw materials.....	770.35	920.90	895.88
Finished goods or in process.....	433.20	407.10	554.15
Total.....	1,203.55	1,328.00	1,450.03
Retail—			
Groceries.....	240.31	307.10	469.81
Clothing.....	569.93		
Shoes.....	23.60	666.05	857.88
Houseware and furniture.....	167.75	316.00	590.84
Shoe repair and alterations.....	242.16	135.28	71.68
Total.....	1,243.75	1,424.43	1,990.21
Accounts receivable:			
Trade accounts.....	565.25	908.75	2,030.26
Farm accounts.....	670.55		
Advance on contracts.....	350.00	819.70	222.60
Total.....	1,585.80	1,728.45	2,252.86
Commissary wood camps.			
Fixed assets—machinery, furniture, equipment.....	494.25	260.38	722.89
Deferred charges—supplies, etc.....	515.45	798.28	1,668.08
Organization expense.....	200.00	61.00	853.86
Advances on farm contacts.....	300.60	266.12	
Total assets.....	23,211.20	35,444.66	42,550.54

Liabilities

Accrued pay roll.....	\$2,210.65	\$1,173.05	\$1,426.22
Accounts payable—purchases.....	220.50	1,165.80	1,113.80
Accounts payable—farm contracts.....	197.70	489.13	202.45
Deposits on fuel orders.....	427.80	603.10	725.35
Bread tickets outstanding.....		256.81	252.24
American trade exchange.....			76.31
Total.....	3,056.65	3,687.89	3,796.37
Scrip issued.....	20,402.30	30,752.70	44,454.40
Less scrip on hand and retired.....	2,033.45	3,272.15	6,315.25
Scrip outstanding.....	18,368.85	27,480.55	38,139.15
Total liabilities.....	21,425.50	31,168.44	41,935.57
Surplus to balance.....	1,785.70	4,276.22	614.97

Pay Rolls

THE pay-roll records given below do not include the so-called executive pay roll, for which no records are kept in the auditing books of the organization. It could not be ascertained whether the persons on the executive pay roll are paid in scrip or in cash, but one of the men stated that he had been promised cash payment but had not been receiving any.

Total pay rolls, December 1, 1932, to February 22, 1933¹

Four weeks, ending Dec. 28, 1932-----	\$16,097.99
Week ending-----	
Jan. 4, 1933-----	2,956.05
Jan. 11, 1933-----	3,076.65
Jan. 18, 1933-----	2,943.50
Jan. 25, 1933-----	2,974.75
Feb. 1, 1933-----	3,418.15
Feb. 8, 1933-----	3,181.20
Feb. 15, 1933-----	2,797.25
Feb. 22, 1933-----	3,016.45

The following table shows the number of workers and the total pay rolls in the different departments for the weeks ending November 26, 1932, and February 22, 1933.

PAY ROLLS OF ORGANIZED UNEMPLOYED (INC.) FOR THE WEEKS ENDING NOVEMBER 26, 1932, AND FEBRUARY 22, 1933

Department	Week ending-----			
	Nov. 26, 1932		Feb. 22, 1933	
	Number of workers	Total pay roll	Number of workers	Total pay roll
Accounting-----	7	\$57.50	9	\$76.00
Cafeteria-----	10	80.20	46	335.25
City labor-----	5	33.00	3	27.00
Clothing manufacturing-----	28	172.10	32	227.40
Contact and sales-----	4	30.00	10	114.00
Dormitory-----	(1)	(1)	3	33.00
Farm contact-----	5	28.00	4	21.75
General office-----	15	68.00	24	169.25
Farm labor office-----	10	88.50	11	89.00
Barter and exchange-----	3	25.00	4	36.00
Publicity-----	(1)	(1)	4	33.00
Receiving department-----	(1)	(1)	2	21.00
Grocery (retail store)-----	21	139.50	22	208.00
Sauerkraut-----	13	45.40	1	12.00
Shoe repair-----	5	37.50	5	37.45
Trucking and transportation-----	35	175.85	40	251.85
Warehouse-----	31	179.55	25	211.35
Wood battalion-----	400	1,609.60	141	782.05
Maintenance of building (janitors, etc.)-----	13	82.50	22	188.00
Miscellaneous-----	(1)	(1)	3	22.50
Total-----			2,411	3,016.45

¹ Not available.² Some employees on a part-time basis.

Value of Scrip

THE organization has never been in position to supply all the essential needs of the unemployed. Such items as sugar, coffee, milk, and butter, about 50 per cent of the meat, carfare, gas, and electricity, have to be paid for in cash. This means that the recipients of scrip money are compelled either to enter upon various barter plans of their own, which would in the final stage bring them the necessary cash, or sell the scrip for whatever it will bring on the market. There is no definitely established quotation for the value of scrip, although it is no secret that any reasonable amount of it can be bought at the rate of

¹ Pay rolls do not include the so-called executive pay rolls, nor the amounts, if any, paid in cash.

50 cents on the dollar, and even less. So long as the scrip remains within the confines of the organization, it has no effect either on the rate of wages or on the prices of commodities. But a considerable number of outside dealers and professional groups have been accepting scrip in exchange for either commodities or services. Goods produced by labor paid in scrip are being sold by outside concerns for cash. Just now the organization is planning to enlarge the production of such goods produced by labor within the organization and sold by outside concerns for cash. The effects of these operations and of the falling value of the scrip dollar can not now be estimated, but it is conceded that there are dangerous elements in this situation.

Wood Operations

THE following table shows the statistics of wood operations of the organization during the period September 1, 1932, to March 1, 1933:

Number of camps operated.....	31
Total wood cut ¹ (cords).....	5,687
Share of Organized Unemployed (cords).....	4,051
Total wages to wood battalions.....	\$25,814.02
Cost of transportation of workers.....	\$1,728.84
Total delivered to warehouse (cords).....	1,816
Total sold (cords).....	1,471
Balance left in warehouse March 1, 1933 (cords).....	345
Balance left in camps March 1, 1933 (cords).....	2,235
Balance left in camps, February 22, 1933 (cords).....	2,231
Balance left in warehouse, February 22, 1933 (cords).....	314

In the following table data are shown for wood operations in the last week and the highest and lowest weeks in the same period:

WOOD OPERATIONS OF THE ORGANIZED UNEMPLOYED (INC.) IN SAMPLE WEEKS OF THE PERIOD SEPTEMBER 1, 1932, TO MARCH 1, 1933.

Item	Week ending Mar. 1, 1933	Highest week Dec. 21, 1932	Lowest week Sept. 24, 1932
Total pay roll.....	\$777.45	\$2,531.14	\$96.00
Transportation (gas).....	\$55.12	\$192.06	\$5.94
Total share of Organized Unemployed (Inc.) (cords).....	119½	334	12
Wood delivered to warehouse (cords).....	123½	65½	0
Cost of delivery.....	\$285.45	\$129.59	0
Sawing and handling at warehouse.....	\$154.30	\$114.30	0
Delivered to customers (cords).....	93	64	0
Cost of delivery.....	\$121.32	\$71.57	0

The average selling price in scrip was \$12.75 per cord for oak and \$10.75 per cord for mixed wood; \$1 extra for piling in basement. Somewhat lower prices have been quoted for cash payments.

Unemployment Registration

THE total number of persons who had registered with the Organized Unemployed (Inc.), up to February 16, 1933, was 26,815. The distribution of such persons by sex, number of dependents, etc., was as follows:

¹ Partly on a sharing basis, partly for the work of clearing the land.

NUMBER OF PERSONS REGISTERED WITH ORGANIZED UNEMPLOYED (INC. UP TO FEBRUARY 16, 1933)

Item	Prior to Nov. 16, 1932	Nov. 16, 1932, to Feb. 16, 1933	Total
Total persons registered	25,012	1,803	26,815
Persons registered:			
Male	19,930	1,355	21,285
Female	5,082	448	5,530
With no dependents	8,595	435	9,030
With dependents	16,417	1,169	17,586
Total dependents	40,538	2,972	43,510
To work with Organized Unemployed (Inc.)	17,150	1,803	18,953

Summary and Conclusion

ASIDE from the justness of the criticisms which have been made regarding the management of the enterprise, it is evident that during the first few months of its existence the Organized Unemployed (Inc.) actually accomplished a good deal, particularly in its farm activities and in the wood department. While the figures issued by the organization referring to the number of unemployed men and women who were aided through its activity can not be supported by the statistical records of the organization, a large number of unemployed workers undoubtedly did profit through the operations carried on, even if only to the extent of receiving shelter and enough food so that they were not compelled to apply to the city relief or charity organizations.

It is stated by the executive officers of the Organized Unemployed (Inc.), and it appears to be true, that the larger part of the unemployed who received work aid from their organization came from the "white collar" group who were on the border line and who would rather starve than undergo the humiliation of applying for aid through the regular relief channels. Even at the present time, with the productive activities of the organization at their lowest ebb, its resources in farm produce and in cash nearly exhausted, and with the value of the scrip dollar, as a means of purchasing such necessities as the organization is not in a position to supply, cut in half, there is a nucleus of perhaps a few hundred people, mainly office workers at the general headquarters, who depend on their scrip income of \$6 to \$10 a week as their only means of a livelihood.

At the present time, although the executive officers still maintain an optimistic attitude, the financial affairs of the organization are in a rather precarious condition. Assuming that the methods of evaluation of its assets used by the organization are strictly conservative³ and forgetting for the moment that the statement of its liabilities as carried in the books of the auditing department altogether omit the large amounts of farm produce, commodities, equipment, and cash contributed by farmers, and the assistance by the sponsoring committee of business men and by others, the financial statement as of February 22, 1933, still makes it sufficiently clear that the only liquid assets of any appreciable value possessed by the organization consisted of the 2,235 cords of cut wood scattered in the several camps, some 35 miles away from the city of Minneapolis. The organization itself has not had the cash needed to transport the wood to the ware-

³ See financial statements, p. 750.

house, and is compelled daily to cancel orders for wood because of its inability to make deliveries. It has been suggested by some of the members of the sponsoring committee of business men that this committee may find it necessary to "invest" an additional \$3,000 to enable the Organized Unemployed (Inc.) to bring the wood to the city while the winter lasts and there is still a demand for wood as fuel. The effect of such action by the sponsoring committee, or of the failure on the part of the committee to take any action, on the destinies of the Organized Unemployed (Inc.) must be left to the future to decide.

It is apparent that, whatever fate befalls the Organized Unemployed (Inc.), its success or failure can not be used as a criterion in judging other self-help organizations which have followed less centralized methods of organization and operation. The director of the organization stated that during the first few months of the existence of the Organized Unemployed (Inc.) a single dollar of charity judiciously applied to the productive purpose of bringing together the surplus of goods and the surplus of labor produced as much as \$10 of effective aid for the unemployed, and it was the hope of again accomplishing this purpose which induced his sponsoring committee to come to his aid in October when lack of ready cash and organization difficulties threatened the existence of the organization. It is possible that the committee may come to the rescue again, but it is considered questionable whether this would be worth while in view of the policies followed which concealed from the unemployed men and women, on the ground of the maintenance of their morale, the fact that they were after all the recipients of charity. It seems that a more businesslike system of accounting and less propaganda would, perhaps, have shown smaller immediate results but would have formed a more solid basis for the enterprise.⁴

MARCH 10, 1933.

⁴ This report is based on information and data secured by the representative of the bureau from records of the organization, from conferences with Doctor Mecklenburg, Mr. Earl Lenth, secretary-treasurer, and Mr. W. J. Blamey, general manager of the Organized Unemployed (Inc.), and also with all the managers of the individual departments; an official conference with the sponsoring committee especially called for this purpose; and a conference with the mayor and the representatives of the community fund, family welfare, Federation of Churches, State employment office, and the Central Labor Union. Owing to the manner in which the records are kept, it was found impossible to check the reports, particularly the financial statements, which were submitted by the organization.

The Barter Movement in Cleveland

THE earliest barter unit in Cleveland began operations without any formal organization late in the fall of 1931. This was a private enterprise, for profit, but it was sponsored in a measure by certain local clubs. It employed at one time as many as 200 men, who were paid in barter credits redeemable in goods received by the promoter of the enterprise in return for work done under contract. Much of the work was done on a cash basis. The financial success of the enterprise led to various other barter arrangements on a commercial, profit-making basis. In some cases grave abuses crept into the movement, calling for intervention by public authorities.

Other private barter arrangements that have made some headway have been undertaken by business firms with each other and with their customers. In this way a considerable number of men have been kept at work, the companies exchanging their products and paying their men partly in goods thus interchanged. In some cases customers have been permitted to pay obligations by means of goods, and the goods have been used to pay wages and for other purposes.

A somewhat different private plan for encouraging barter has been the printing of a semimonthly periodical containing lists of goods and services offered and desired. The periodical is issued by a printing company and is financed by ordinary paid advertisements and by a charge of 2 cents per copy. "Swap" ads are inserted without charge. A recent issue contained 100 free ads. About 5,000 copies are printed and distributed by local drug stores and other agencies.

The Service Exchange Bureau

ANOTHER private enterprise, but an undertaking that is on a purely nonprofit-making basis, was begun in June, 1932, mainly at first for the exchanging of services. This came to be known as the Service Exchange Bureau. It is located in the photograph studio of the founder, Mrs. E. Standiford-Mehling. She undertook in a small way to maintain a clearing house of information for her clients, who often needed each others' services, and who found it possible, through the agency of the artist's office, to arrange for exchanging their services on a barter basis.

Each registrant fills out a card. At the top of the card are spaces for the file number to be assigned to the registrant, his occupation or profession, and his telephone number. Then follows the statement, "In accepting this service I agree to pay to the Service Exchange Bureau 5 per cent on each deal consummated without further obligation on either side." Below the name and address are two parallel columns headed "I will give" and "I want in exchange," to be filled out by the registrant. These cards are filed numerically in blocks of 10, and there is an alphabetical finding list for locating the cards in case a registrant forgets his file number.

On the basis of the information contained in the registrants' card file, two working files have been constructed, one an occupational file, the other a merchandise file. In the occupational file about 160 occupations are included, ranging from "accompanist" to "X-ray technician." On one side of the card are listed, by numbers, the registrants of each occupation, and following each number is a statement

of the services or merchandise he will accept. On the other side, in the parallel column, is a list of registrants, by numbers, who want the services afforded by this particular occupation, and the numbers are followed by information as to what each has to offer. Under "Dentistry," for example, 20 dentists have registered, while about 140 registrants have expressed a desire for dental work. The following will serve to illustrate the plan of the occupational file:

DENTISTS

Number	Will give services for—	Number	Dentistry wanted in return for—
293 10	Auto repairing. Clothing.	47 511	Farm produce. Auto repairing.

In a similar manner a merchandise file is maintained. There are nearly 100 merchandise groups, ranging alphabetically from "accordion" to "window shades." On one side of a merchandise file card are the persons, by numbers, who have goods of a particular kind to offer, with information as to what they want in return; and on the other side of the card are the persons, by numbers, who want that particular kind of merchandise, with information as to what they have to offer in payment.

The use of numbers has the advantages of the privacy as well as the brevity of a code system. A registrant calling at the office can readily discover what others who may want his goods or services are willing to offer in return.

There is also a contact and information file, relating to the immediate work of bringing the parties to a deal together, and the results, though the maintenance of this file depends largely on the volunteering of information by the persons concerned.

Although the registration card commits the registrant to the payment of a commission, this is not enforced. A large proportion of the registrants are unable to pay a cash commission and the bureau has no arrangements for handling goods, even assuming the possibility of payment of the commission in kind. Most of the transactions involve services rather than goods. In practice, payments to the bureau for services are limited to postage and telephone calls. The clerical work, the contact work, and the general responsibility are burdens assumed by the founder of the bureau.

From small, informal beginnings the work increased till considerably more than 500 persons have registered for the bartering of their services for goods or other services, and a considerable additional number have registered for the bartering of merchandise alone. Illustrations of actual contact work by the bureau are to be found in the fact that it has handled 159 calls for food, 150 calls for clothing, and 112 calls for dental work.

The work has become so extensive and burdensome, and the problem of making it self-supporting is so difficult, that efforts are being made to arrange for transferring it to some social agency equipped for handling it on a still more extensive basis.

The Exchange League of the Alumni Federation

A SOMEWHAT similar plan has been adopted by the Cleveland Alumni Federation, which has established an Exchange League, with emphasis on the bartering of ordinary labor for goods or for profes-

sional services. It is located in the offices of the federation, and is maintained by the officers of the federation without profit, purely as a public service. The files contain the names of several hundred laborers under about 150 classifications, including bricklayers, carpenters, farmers, gardeners, handy men, and so on, through the alphabet to woodcutters. A few professionals are included, as an architect, a civil engineer, and a dentist. It is stated that practically all of the persons listed are willing to do any sort of work in exchange for food, clothing, shoes, dental and medical aid, etc.

The registration sheet calls for the trade or occupation, age, religion, nationality, whether married or single, number of children if any, color, sex, former employer, how long unemployed, services or goods offered, services or goods desired, and supplementary remarks. Efforts are being made to verify the information furnished and to make barter arrangements only with dependable workers and responsible professional people.

This work was not undertaken until late in January, 1933, and the number of arrangements consummated has been small. Efforts are being made to interest farmers in the bartering of produce for labor and professional services through the league.

The South End Mutual Exchange

THIS organization was initiated by the University Neighborhood Centers. Barter methods used in other cities were studied for several weeks. The present governing body consists of representatives of the University Neighborhood Centers, the Associated Charities, the Broadway Y. M. C. A., the Kiwanis Club of Southeast Cleveland, local Catholic parishes, the Ministerial Association, the local Lions Club, and the South End Merchants Association. In addition, the municipal authorities and local groups in other sections of the city are interested in the plan, with the idea of promoting similar organizations in other places, together with a centralized exchange for the entire city.

The plan for the ultimate government of the exchange includes three groups: (1) The sponsoring organizations already mentioned; (2) the workers who have only their labor to offer and who wish to find work through the medium of the exchange; and (3) employers, including business men, professional classes, and farmers, who, in return for labor, will supply the workers with goods and professional services. It is stated that exact plans for the representation of the three groups are to be worked out experimentally.

The work of organization was undertaken mainly by a member of the staff of the University Neighborhood Centers, whose services were loaned to the exchange for the purpose. A building for permanent headquarters has been occupied, and work and equipment necessary for converting it into offices and a store have been arranged for, largely on a barter basis. In addition to the work of the organizer and certain other contributed services, a direct subsidy of \$500 has been secured from the sponsoring organizations. In order to obtain operating revenue, a commission on goods exchanged and work secured is charged, the experimental rate being 10 per cent.

The plan calls for the use of existing facilities for producing goods and services, and it proposes noncompetitive arrangements as far as possible with producers and employers in the vicinity of the exchange

and with farmers near Cleveland. It is recognized, however, that some employers may attempt to use the labor made available by the exchange on a barter basis, not to create additional employment, but to supplant existing employees by means of cheaper labor.

In handling the problem of placing values on the labor and the goods exchanged, the officials of the exchange have announced the following policy: "Because the price of goods has in some instances fallen more rapidly than the wage rate, and in other instances the reverse is true, the exchange will attempt to equalize the price of goods and labor in such a way as to be fair to every one participating."

In order to enlist the cooperation of the two groups for whose assistance the exchange is organized, namely, the unemployed workers who need goods and services and the potential employers who wish to dispose of goods and services, an intensive canvass of the needs and resources of the community has been undertaken. Publicity, through the press, the sponsoring organizations, and other agencies, is used to acquaint the community with the plan. Canvassers are sent out to interview professional men, landlords who may have vacant quarters and may need repair work, business men, and farmers.

Detailed blank forms are circulated and the information received is tabulated for filing in card indexes. On the basis of information secured in this way, an effort is made to check the qualifications and the needs of workers and the reliability of prospective employers who offer goods or services in return for labor. It is stated that if an employer is merely seeking to displace existing labor by more economical labor on a barter basis through the exchange, his participation is not encouraged.

Until the operations of the exchange become more extensive, book-keeping instead of scrip will suffice. It is stated, however, that when enough goods are in stock to serve as a basis for scrip and to make its use more economical than bookkeeping, it will probably be introduced.

Proposed Extension and Centralization of Exchanges

STEPS have been taken by public authorities to curb the abuses arising from efforts to exploit the movement for private profit. Committees of engineers and of public officials have undertaken an intensive study of the situation not only for the purpose of checking practices that are regarded as undesirable but with the idea of promoting the organization of nonprofit-making exchanges.

The immediate problems consist of leadership and finance. The unemployed themselves have shown little initiative, partly because long-continued unemployment and dependence on direct relief have resulted in a condition of helplessness if not of apathy. Social agencies are burdened with heavy duties of administering direct relief, and the inadequacy of funds for this purpose tends to prevent the diversion of any available money into uses requiring a lapse of time, however brief, for making self-help effective.

There is a widely held belief in various circles that the example of the South End Mutual Exchange, if it proves to be successful in spite of extremely inadequate financial support, will lead to other similar units, bound together by a city-wide exchange system. But among the trade-unionists there is a feeling that the barter movement too easily lends itself to the breaking down of labor organizations and of standards of wages, hours, and craftsmanship. Labor unions prefer

to deal directly with employers, and have not been convinced that the employment of labor through barter exchanges is the best approach to the problem. The trade-unions, however, have concerned themselves mainly with skilled labor, and the present problem of unemployment concerns not only the skilled workers, whose unions are able to mitigate in some degree the effects of unemployment, but the much larger mass of unskilled labor, for the most part unorganized. Nor is the problem confined to these classes, for large numbers of the professional and shopkeeping classes are also in desperate need. It is possible that a basis for common action in dealing with the problem may be worked out in connection with the plan of the South End Mutual Exchange for threefold representation in the government of the exchange—representation including the social agencies, the workers, and the employers.

MARCH 7, 1933.

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The People's Exchange of Kansas City, Mo.

THE People's Exchange of Kansas City, Mo., organized in October, 1932, mainly by Dr. J. W. Parker, is the only important self-help activity in that city at the present time. This organization has about 900 members, of whom approximately 50 per cent are skilled mechanics, 30 per cent ordinary laborers, and the remainder professional men, landlords, etc. Both services and commodities are exchanged, mainly on a barter basis but occasionally for cash.

There is no membership fee, though a small fee is contemplated, and no charge is made for the services of the exchange. The present functions of the exchange are simply (1) the keeping of files of members, with information regarding the services or goods they have to offer and desire in return; and (2) the arranging of contacts between members, the actual transactions being handled by the parties to the deals. Other contemplated functions have not been exercised, due to lack of funds required for initial operation. The Council of Social Agencies and other groups interested in unemployment have maintained a policy of using available funds for direct relief only.

Records of transactions are not made and it is impossible to state the number of transactions or the volume of business resulting from the contacts established through the exchange.

The nature of the work so far undertaken requires no elaborate organization. There is a president, a vice president, and a secretary, the present secretary being Dr. J. W. Parker, whose office serves without compensation as a clearing house for filing information and for making contacts between members. These officers form a board of directors. Membership is nonsectarian, nonpolitical, and non-racial, but the directors reserve the right to refuse membership to, or cancel the membership of, anyone whose character might be detrimental to the organization. In practice, membership at present primarily means registration for the purpose of utilizing the facilities of the exchange. So far there has been no general meeting of the members.

Usually the transactions effected through the exchange consist of direct barter between two members, but in a few cases coupons or due bills have been issued. An automobile mechanic, for example, desired insurance, and an agent furnished him with insurance in return for a coupon or due bill for an equivalent amount of automobile repair work. The insurance agent, in turn, had the privilege of indorsing this coupon and transferring it to another member who could supply goods or services desired by the insurance agent, and who desired an equivalent amount of automobile repair work.

The exchange is now working out the details of a proposed extension of the coupon or due-bill method of handling transactions. According to the plan, retail stores, garages, etc., and perhaps professional men as well, would issue to the exchange a limited quantity of due bills giving the exchange a legal claim on an equivalent amount of goods, with possibly certain types of services most frequently in demand also to be included. On the basis of these due bills barter money would be issued, which each member, within limits agreed upon, would accept from any other member. The exchange would reserve the right to present to any member for redemption at any time the due bills issued to it by the member, and to retire an equivalent amount

of barter money. In this way it is hoped to put soundly based barter money into effective circulation among the members, without the cost of establishing and operating an exchange store, and thus to facilitate an exchange of goods and services without the cumbersome work of bookkeeping and direct clearance through the exchange. Members from whom due bills would be received would be limited to individuals or firms of established reputation and responsibility. To provide for possible bankruptcies or delinquencies, a sinking fund would be maintained.

This plan, which entails a number of difficulties, but suggests interesting possibilities, is being subjected to intensive discussion and criticism with the idea of perfecting the details before an attempt is made to put it into operation.

MARCH 13, 1933.

The Dayton Mutual Exchange¹

THE Dayton Mutual Exchange was organized July 23, 1932, and was incorporated August 18. It grew partly out of the need for an outlet for clothing which was being made by a group of unemployed, the raw materials being furnished from private funds. It was chartered as a non-profit-making corporation by a group of 47 local citizens as charter members, and is governed by an executive committee of the members, of whom Elizabeth F. Haswell is president, Walter S. Carr, treasurer, and Lewis F. Carr, manager.

Its purposes, as set forth by the organizers, include the following: "It opens to the unemployed a way to exchange their idle labor power for food, clothing, and shelter. It purposed to aid local business men to move their surplus wares. It is intended to relieve the city, the county, and the Community Chest of the burden of supporting in idleness thousands of unemployed who have lost their purchasing power. It offers a substitute for money as a local medium of exchange."

The office and store of the exchange are located in a building furnished rent free and supplied with heat by the owners. In addition to these subsidies it has secured funds for necessary expenses requiring cash by the sale of what is called "scrip of the Dayton Mutual Exchange." This is issued for cash only and is redeemable only in goods certificates five years after date of issue. It is not a medium of exchange but is in effect a subsidy provided by well-wishers of the exchange, although if the exchange continues for five years and then has goods available for covering its outstanding goods certificates and scrip, the scrip can then be redeemed at face value, by means of goods certificates, in goods owned by the exchange. The amount of scrip outstanding on March 13 was \$430.

Goods certificates are issued in return for goods or services furnished to the exchange. They are printed by a cash register, with date, serial number, amount, etc., and a statement that the certificate "will be accepted at the value stated above in exchange for our goods as listed. It will not be redeemed for cash." Each certificate contains the printed signature of the president and the treasurer.

When certificates are issued for goods, the exchange usually allows the prevailing wholesale market prices. They are also issued for certain services, as for labor spent on making clothing out of cloth furnished by the exchange, the added value of the finished goods being regarded as justification for certificates being issued for such services. It is also stated that certificates are issued in part payment of managerial labor, but there is a reserve of goods in stock bought for cash received from scrip rather than for goods certificates immediately redeemable in goods. At the last inventory before March 13, the goods certificates outstanding amounted to \$470; goods owned amounted to about \$1,500, at retail prices; and goods in stock on consignment, to about the same value.

Goods are secured mainly from farmers, local craftsmen, and local firms, some of whom accept goods certificates or make barter arrangements among themselves through the medium of the exchange. An illustration of these barter arrangements which enable the exchange to add to its inventory is a complicated deal involving a newsprint

¹ The Cooperative Production Units of Dayton were described in the March, 1932, issue of the Monthly Labor Review.

factory, a newspaper, a raincoat factory, and a paint factory. By means of an interchange of newsprint, advertising space, raincoats, and paint, the exchange secured a supply of raincoats and paint and was enabled to barter a surplus for other kinds of goods. But such arrangements are complicated, require much contact work and ingenuity, and are not easily balanced in value. The number of such deals is therefore not large.

The goods certificates are accepted by a few local dealers, who ordinarily use them for paying their employees, these in turn redeeming them in goods at the exchange. Several dentists, doctors, and lawyers also have agreed to accept goods certificates from persons to whom they were originally issued, and in such cases the certificates are either redeemed by the professional men themselves or by their employees, to whom the certificates are paid as wages. In such ways the goods certificates have a limited local circulation as a substitute for money.

The exchange attempts to avoid competition with regular channels of trade by selling its goods, with a few exceptions, for goods certificates only. But it is necessary to use cash in securing certain essential goods and in meeting a part of its operating costs. In addition to cash from the sale of its scrip, the exchange has a small cash income from the sale of clothing made under its auspices to the city and the county for their relief agencies, and also from the sale of novelties and ornamental handicraft work. It sold a considerable number of living Christmas trees, and its sales of a single novelty, a "depression bug" made from the burr of the teasel weed and devised by a local craftsman, have gone beyond 2,000.

As a result of the attempts of the exchange to avoid competition, the attitude of local merchants is not hostile, but the activities of the exchange are restricted. Its monthly turnover of goods was as high as \$1,100 before the recent closing of the banks, and the tying up of bank deposits approximately doubled the amount of business. Nine families have been afforded direct employment to an extent which has enabled them to do without public relief, and a variable amount of aid, both direct and indirect, has been afforded a much larger number of unemployed town workers and hard-pressed farmers. Several barter transactions on a wholesale basis have not only increased the amount and variety of goods handled by the exchange but have had some effect in stimulating local industry.

It is hoped that the activities of the exchange can be expanded and made more effective in the resumption of the interrupted flow of goods and labor by means of contracts with perhaps 50 business firms for bartering goods and services through the medium of the exchange, the contracts to become effective when a specified number of firms have entered into such agreements. Efforts are also being made to arrange for more definite and extensive cooperation with farmers.

MARCH 17, 1933.

The Barter Movement, Oklahoma City

The Shirt Sleeve Exchange

THE Shirt Sleeve Exchange of Oklahoma City was incorporated October 12, 1932. The articles of incorporation state that it is to be "a benevolent association to facilitate exchange of services and commodities between the unemployed or partly employed and farmers for the purpose of removing surplus labor and surplus farm products from the market and for the further purpose of removing the pressure which the labor surplus and produce surplus exert upon prevailing wages and prices."

The exchange was an outgrowth of the Unemployed Workers' Union, which had been organized mainly for influencing local authorities in connection with relief programs. Partly because of the advice of interested citizens who were not members of the union, it decided to undertake self-help by means of a barter exchange. Most of the incorporators and officials were members of the Unemployed Workers' Union, but the secretary was a local business man.

The membership consisted of the incorporators. Those who desired to utilize the exchange simply registered with it, indicating the nature of the services or goods which they had to offer and which they desired in return. There were about 700 registrants, including unskilled workers, craftsmen, and a few members of the principal professions.

There was virtually no financial backing, although certain interested citizens furnished some of the necessary equipment; and some of the incorporators carried on most of the work without pay. It was hoped that the principal cost of operating the exchange could be handled by securing goods at wholesale prices by barter and selling at prevailing retail prices. The amount of work secured for the registrants is not known, as the exchange merely arranged the contacts between employers and workers, charged no commission, and made no follow-up for recording deals actually made. No production work such as canning, sewing, etc., was undertaken because of lack of resources.

A small store was established, and during the two and one-half months of its existence, it handled about \$1,000 worth of goods. The goods handled were secured from individuals who had second-hand articles which they offered for other goods; from farmers; from bakers (mostly unsalable bread); and small quantities from grocers and produce commission men in exchange for surplus produce.

In order to facilitate the exchange of goods and to encourage employers to hire labor through the exchange, due bills or receipts were issued. These receipts were for goods received, and they were used to a very limited extent by dealers and professional people in paying for work, the workers redeeming the receipts in goods at the store.

From its inception the exchange encountered serious and ultimately fatal obstacles, although legally it is still in existence. The management seems to have been diligent, conscientious, and efficient within the limits of its resources, but its resources were inadequate. A few individuals outside of the organization were helpful, but in general it failed to secure the support or even the acquiescence of the retail stores and the various controlling organizations. When it became apparent that the success of the barter movement could not be attained by means of the sponsorship of the unemployed themselves, the management agreed to the organization of a new exchange, with new articles of incorporation and a radically different sponsorship.

The Self-Help Exchange

THE new organization assumed the name of the Self-Help Exchange. A few of the incorporators of the Shirt Sleeve Exchange were included, but the president, the vice president, the secretary, and the treasurer are all leading business men. Of the 20 members of the board of directors, there are 12 business men, 2 civic workers, 1 lawyer, 1 architect, 1 farmer, and 3 who may be said to represent the original unemployed sponsors of the Shirt Sleeve Exchange. A statement issued by the officials of the exchange emphasizes the fact that it is approved by employers and merchants: "The exchange has the official endorsement of the Oklahoma City Retailers' Association and has the cooperation of all interested organizations and agencies, including the community fund and its affiliated agencies. The officers and directors of the exchange are substantial business men."

The exchange was organized on January 4, 1933. The new orientation is indicated by the articles of incorporation, in which it is stated that the purpose is "to carry on benevolent and charitable work, particularly to find employment for partially employed, with the right to set up an exchange with facilities for the exchange of labor or services or commodities."

About 1,500 registrants, mostly manual workers or persons willing to do general work, have filed their applications with the exchange. In addition, the Emergency Unemployment Relief Bureau, a quasi-public body which administers a comprehensive relief plan, makes available its file of applications of people who wish to barter their labor. The number of jobs filled is not known, because the exchange merely serves to make contacts possible between registrants and employers, and because some jobs are filled without the direct intervention of the exchange, by the payment of wages in the form of exchange scrip. The scrip comes into the hands of employers in two ways: (1) By the sale of scrip to employers for cash; and (2) by the acceptance of scrip, by employers, from workers or farmers who have secured it in return for goods. Work obtained on a barter basis by the Emergency Unemployment Relief Bureau and turned over to the exchange up to February 24 amounted to 88 orders.

The wages paid for labor and the hours and conditions of work are arranged by employers and workers. When an employer specifies the conditions, the exchange merely offers the job to a registrant, jobs being offered "in rotation and with the needs in each case in mind." An indirectly publicized rate of pay is 25 cents an hour, but there is a wide variation, not only for different kinds of work but for the same type of work.

A store has been established in a large building, the use of which has been granted to the exchange by the owners. Certain local firms furnished materials and equipment for remodeling the building, and the city paid for some of the labor required in preparing the building for use as a store. For the purchase of goods not available through barter, about \$400 in cash has been secured from employers from the sale of exchange scrip, the purchasers being encouraged to use the scrip in paying wages, the workers in turn to redeem the scrip in goods. Some second-hand goods have been secured from individuals, and small quantities of produce from farmers, in return for scrip. The store was opened February 1, 1933. During the first two weeks

in March, the turnover was about \$300. Goods in stock are valued at about \$500 at wholesale prices.

Scrip is issued in several denominations. The terms are stated on the face of each certificate as follows: "The Self-Help Exchange, an Oklahoma corporation, agrees to deliver to bearer hereof on demand in return for this exchange certificate 10 cents (or the amount of the certificate) in goods or services on hand at the time of presentation at the then market price at its place of business in Oklahoma City, Okla., subject to the conditions on the reverse hereof." On the reverse, one of the conditions is to the effect that the certificate shall be void unless presented within 60 days after the publication of any notice in a daily newspaper requiring redemption. The amount of scrip issued by the middle of March for cash and for goods was about \$900.

The small volume of business is due in part to the fact that the exchange has not been long in operation, and in part to apathy on the part of the unemployed, combined with apprehension that the exchange may be utilized by employers as a source of cheap labor for regular work as well as for "made" work not otherwise available.

MARCH 17, 1933.

"Barter Day" in Logan, W. Va.

LOGAN, W. VA., is in a region which was originally settled by poorer classes of whites who found it impossible to compete with negro labor in the lowlands, and who managed to live meagerly but independently by cultivating the hillsides and the narrow valleys. With the growth of the coal industry, they surrendered title to the land and gave up the tilling of the soil for wage work in the coal mines. With the decline of the coal industry they lost for the most part the opportunity for making a living as miners, and having already given up their claims to the land, they now find themselves economically helpless.

The extreme distress of the people led the American Friends' Service Committee to accept a local invitation to undertake relief work. A part of the work of the committee has been the sponsoring of barter activities. But the destitution of the miners has been so prolonged and has become so extreme that they have little to offer for other goods. During a barter day, for example, when the weather was rainy and severely cold, a miner offered to barter his coat for some clothing for his baby. The committee found it necessary to provide a supply of goods as a nucleus for bartering, and as far as possible to create opportunities for work in return for goods. In the case of the man who offered his coat for baby clothes, for example, the clothes were supplied in return for work by his wife in washing and mending second-hand clothes received from others.

The first barter day was held January 14, 1933. In preparation, publicity was secured in the local papers, cooperation of high-school students and others was arranged for, and a circular was distributed. The circular, in display type, read as follows: "What Have You To Swap? Buy without money but not without your money's worth! Do you have an old rocking chair that you would like to swap for an ironing board? Would you give a raincoat for a sack of potatoes? Is that old rooster worth 3 quarts of pickled beans? Then don't miss the barter day next Saturday. Bring something to swap and bring your friends. January 21, at 2 o'clock. Adjacent to the freight station, Logan."

The number of people participating has usually been about 70 each week, in spite of the fact that on every barter day since the beginning the weather has been either rainy or cold. The types of barter carried on consist of exchanging of goods among individuals who attend ("swapping" as at the ancient fairs and market days), and exchanging of goods brought in by people of the community for goods furnished by the committee. The committee furnished 200 pairs of new shoes and 100 union suits, and small quantities of goods were donated by local residents. Goods received in return by the committee consisted mainly of canned fruit, pickles, and second-hand clothing. The participants found considerable interest, so it is reported, in the kinds of transactions often made. For example, a pair of shoes was traded for an overcoat, the overcoat for a hog, and the hog for carpentry work at the committee's headquarters. A pair of shoes was traded for a woman's suit, a can of pickles, and two jars of jelly. An old man bartered a woman's coat for a pair of spectacles which happened to be adapted to his eyes. Popular interest in the seemingly trivial phases of barter day has its value in

affording a weekly opportunity to get together and enjoy a certain amount of diversion. It is reported that the occasion has had a noticeable effect in relieving the gloom of the depression.

It is realized that the amount of goods available for barter is severely restricted and efforts have been made to arrange for the bartering of labor and for productive activities such as would add to the store of goods and at the same time afford wholesome employment. A small sewing room has been provided. A limited number of opportunities for work resulted from arrangements for cleaning up certain mining camps in return for goods. Efforts are being made to increase the opportunities for productive work.

It is also hoped that the work can be expanded by means of a registering of goods and labor available for barter, thus facilitating the interchange of both services and merchandise between barter days. With the opening up of the farming season the interchange of surplus farm produce is also expected to increase the volume of barter.

Adjacent communities have also become interested in the plan, and in some of these communities, not only the mining camps but near-by towns, such as Morgantown, definite moves have been made to adopt the same or similar methods.

MARCH 24, 1933.

The Barter Movement in Memphis

THE Unemployed Citizens' League of Memphis was organized December 8, 1932, with a constitution and general organization based on the Seattle plan.¹ It had the support, not only of unemployed workers, but also of certain public-spirited citizens who were interested in the problem of self-help among the unemployed.

At the time of organization a small store was opened, the stock consisting mostly of groceries secured either for cash or as donations from wholesalers. A few second-hand clothes, articles of furniture, etc., were secured by bartering the labor of members for goods. But persons with goods usually put a valuation on them so far beyond sale value in a store that this source of merchandise was severely restricted. Due bills are issued, good only for merchandise in stock at the store. No produce has been secured as yet from farmers. It is primarily a cotton country, and farmers have little produce to sell or barter. Goods received during the period from February 11 to 28 were valued at \$87. From March 1 to 20, goods sold amounted to only \$32.86.

The principal work done by members for the organization has consisted of wood cutting. The sale of wood enabled the organization to secure money for part of its stock of goods. A few shirts have been made for members and, on order, for others. The volume of employment secured for members has been very small. From February 11 to 28, such jobs afforded wages in cash or barter amounting to \$23.85; and from March 1 to 20, to only \$6.50.

The organization has been restricted, not only by lack of resources, but also by grave dissensions among its members, one faction even bringing suit against another. But a reorganization has been effected, there is some evidence of renewed interest, and with the opening up of seasonal work in the spring it is hoped that a greater measure of success may be achieved.

On March 4 there was held at the municipal auditorium and market place a widely advertised "barter day" and public auction. The volume of business is not known, as those in charge of arrangements merely provided facilities for individual bartering. The success was not so pronounced as to lead to a weekly repetition, but plans are under way for a similar arrangement, the day to be devoted to a combination of bartering, auctioneering, and special sales by local merchants.

A plan for "making" work was sponsored by the employment bureau of the American Legion. The bureau sold 5,400 day's work tickets at \$1 each. These tickets were handled by the bureau, and the money was turned over to the mayor's relief fund. Workers who went out on the dollar-a-day jobs were paid in groceries from the municipal supply depot.

MARCH 21, 1933.

¹ A description of the Seattle plan will appear in the May issue of the *Monthly Labor Review*

The Barter Movement in St. Louis

IN JUNE, 1932, an Unemployed Citizens' League was organized at St. Louis. It was based on the Seattle organization's plan¹ and was sponsored by a small group of individuals not themselves unemployed but interested in the problem of unemployment. It also had the backing of the League for Independent Political Action. A parent group was organized and several locals were formed. Each member of a local was expected to fill out a "Citizen's registration questionnaire and application for membership." The questions concerned not only the economic status of the applicant but also matters pertaining to his relations to politics and trade-unionism.

The following comprehensive plan of action was widely advertised:

Purpose: To form an organization of the unemployed for the purpose of cooperative self-help by an exchange of services for:

1. **Food.**—Produced, canned and distributed through commissaries operated by themselves.

2. **Clothing.**—Made and distributed by the unemployed through above commissaries.

3. **Housing.**—In exchange for repairs and reconditioning of vacant building, the occupancy of the building is to be had.

4. **Fuel.**—To be secured in coal mines not now operated because they are unprofitable, in exchange for foods and labor.

5. **Health.**—To utilize the unemployed nurses and those of the medical profession who are willing to cooperate in maintaining a high standard of sanitation, food inspection, and hospitalization.

6. **Recreation.**—To fill the need of all people for some play, we propose to take over available vacant lots for horseshoe pitching, indoor, and other recreational activities.

7. **Education.**—To train the unemployed to become more efficient workers and enabling them to raise their standard of living so that they may live more fully.

No salaries are to be paid to anyone connected with the organization.

Before any significant work was done toward the carrying out of this program, factional differences and local opposition developed. Hoped-for contributions from the social agencies and individuals were not forthcoming. The members themselves, for the most part, were almost destitute of resources except for their willingness to work, and not having anything tangible to absorb their energies, they seem to have devoted themselves to talking about what ought to be done. The result was a break-up of the league into factions.

Evidences of concrete action in the way of self-help are extremely limited.

(1) Last fall some of the members of the league made arrangements with some farmers to dig their potatoes in return for a part of the crop. Second-hand trucks were secured and enough gasoline was obtained to enable the group to carry out the arrangement. But it was found that the cost of gasoline and necessary work on the trucks amounted to more than the market price of the potatoes obtained.

(2) Another group, in a colored section, occasionally held meetings for carrying on such activities as sewing and canning.

(3) A third group puts on an occasional show in a vacant theater in cooperation with a local drama league. The admission charge is payable in money or in goods. The work of this particular group is apparently more largely educational and propagandist than economic.

(4) Some unsalable bread was secured from bakeries and distributed among the members.

MARCH 9, 1933.

¹ A description of the Seattle plan will appear in the May issue of the Monthly Labor Review.

EMPLOYMENT CONDITIONS

Cooperative Farm Plan of the B. F. Goodrich Co.

A N ACCOUNT of the manner in which the B. F. Goodrich Co., Akron, Ohio, met the problem, during the past year, of providing adequate subsistence for former employees and employees on part time is given in a pamphlet issued by the company entitled "Industrial Cooperative Gardening."

The steadily increasing unemployment during the winter of 1931-32, with the consequent increase in charity requirements, which stimulated the development of various plans in different localities prompted the company to undertake a cooperative gardening plan which would utilize the idle time of these workers and avoid the necessity of their being placed on the charity rolls. As the buying power of the employees to be assisted was either extremely limited or entirely nonexistent, it was felt by the company that established producing and marketing facilities would not be disturbed under a plan by which the men consumed what they produced but which created no surplus for sale or barter. These employees and former employees, for many of whom there was little hope of recall to occupations for which they had been trained, had generally satisfactory labor records and the company was interested therefore in developing an adequate relief plan for them.

After consideration of the problem by plant superintendents and officials, it was decided that a project was required which would provide 150,000 man-hours of work during the summer months and assure the participants as great a reward as possible. As a cooperative farm operated on mass production principles seemed the most practical solution to the problem, the Akron Community Gardens (Inc.) was formed and the industrial gardening experiment, embracing about 200 acres of vegetable planting, was established. The managers of the experiment had the advantage of the company's experience with mass industrial production, the principles of which it was determined could be applied to the raising of crops, thus assuring constant, uniform care, maximum yield, and equitable distribution. It was considered that the allotment of small plots of land for individual gardens, which had been done in many parts of the country, failed to meet the situation, since in general persons attempting to work such gardens were without experience and could rarely be given sufficient direction to secure satisfactory results. As the company had no similar experiment in mass gardening to guide it, conferences were held with various agricultural agencies of the State and city authorities concerned with relief organizations. It was estimated that a maximum of 750 former employees and part-time workers would enlist in the movement during a 25-week period, and leases were secured early in May on about 275 acres of land situated about 5 miles from the Goodrich factories, 200 acres of which were suitable for the raising of vegetables. A certain amount of

preparatory work, such as removal of brush and débris, was required and plowing was started as fast as the land could be made ready. Drainage ditches were dug and the necessary buildings for care of the workers and the produce were erected. After the start men enrolled rapidly and a labor rotation plan was established, in most cases the individual working one 8-hour day a week. The best seed and potatoes were purchased for planting and the seed potatoes were prepared under the direction of an expert potato grower. The men were divided into squads under the direction of one of their number, and it was noted throughout the season that the men who had the best shop records in almost every instance made the best garden workers, giving a striking demonstration of the flexibility and adaptability of the industrial worker. Transportation to the farm was provided by the company, first by company trucks and later by bus; necessary specialized workers were provided; and seeds, equipment, and miscellaneous items were furnished by the company at a total cost of between \$9,000 and \$10,000.

The first distribution of vegetables was made on June 23, the vegetables being gathered by one crew and bunched and wrapped by another group. This plan was followed throughout the season and enabled 125 men to obtain a 2-bushel bag and a basket of vegetables in three minutes at the end of the day. The distribution house was 36 feet long and the produce was stacked back of the counter on alphabetically marked shelves, disbursement being made to the men who lined up under the various letters at quitting time.

In many ways, it is said, the regular routine at the farm resembled that of any army post. The roll was called in the morning before the men went into the fields and the work for the day was detailed to the various squad leaders. Tools were issued to the workers, who returned them to their designated places at night.

In the division of the produce account was taken of regularity of attendance, extra work, and the time of the season during which the worker joined the program. The total value of the produce grown divided by the total number of man-hours gave the value per hour, and with this rate and the worker's total time the credit for each participant was computed. The average rate per day, figured in produce amounted to \$1.60 and compared favorably with the average daily farm wages of \$1.60 to \$1.75, which were paid in that part of the State in the summer and fall of 1932. After the seasonal distribution of green vegetables, the balance of time invested by each worker was compensated by the equivalent value in potatoes, navy beans, corn meal, and rolled oats, the two latter commodities being obtained from a suburban mill in exchange for corn on the cob at wholesale rates. A total of 936 men took an active part in the gardening, working from a minimum of 4 hours to a maximum of 290 hours, or an average of twelve 8-hour days per worker. The total man-hours worked amounted to 110,000, but it was found that the same crops with the same methods of cultivation could have been produced with a maximum of 75,000 man-hours, so that it may be considered that the extra hours represent "made work."

It was at first thought that the large amount of surplus produce should be placed with a canning plant, but as the local canneries were equipped to handle only certain types of vegetables this plan was abandoned and the workers' families were encouraged to do their own

canning and preserving. In general, excellent results were obtained from the home canning, one worker's family, for example, canning 1,000 jars of food for the winter months.

The following table shows the total acreage planted, the total yield, and the yield per acre of the Goodrich gardens:

ACRES PLANTED, TOTAL YIELD, AND YIELD PER ACRE OF SPECIFIED CROPS OF THE B. F. GOODRICH CO. COOPERATIVE GARDENS, 1932

Crop	Acres planted	Total yield	Yield per acre
Potatoes	63.0	6,627 bushels	105 bushels.
Navy beans ¹	40.0	20,647 pounds	3,310 pounds.
Field corn ²	25.5	1,000 bushels	39 bushels.
Sweet corn	11.0	5,815 dozen	525 dozen.
Tomatoes	9.5	73,724 pounds	7,750 pounds.
Cabbage ³	8.5	101,937 pounds	12,000 pounds.
Green beans	8.1	28,428 pounds	3,520 pounds.
Turnips	7.6	5,493 pounds, greens 53,670 pounds, turnips	720 pounds. 7,050 pounds.
Beets	3.8	18,762 pounds	492 pounds.
Peas	3.0	2,870 pounds	955 pounds.
Pumpkins	3.0	9,026 pounds	3,010 pounds.
Peppers	2.0	1,600 dozen, sweet 5,791 dozen, hot 9,755 dozen, cayenne	800 dozen. 2,895 dozen. 4,875 dozen.
Carrots	1.2	7,193 pounds	6,000 pounds.
Kale	1.1	8,294 pounds	7,500 pounds.
Summer squash	1.0	11,590 pounds	11,590 pounds.
Spinach ⁴	1.0	115 pounds	115 pounds.
Onions	.6	2,300 dozen, green 787 pounds, dry	3,830 dozen. 1,310 pounds.
Swiss chard	.5	487 pounds	970 pounds.
Radishes	.4	1,233 dozen	3,080 dozen.
Mustard	.3	853 pounds	2,840 pounds.
Lettuce	.2	117 pounds	585 pounds.

¹ 40 per cent of the navy bean crop picked green due to lateness of maturity and pending frost.

² In addition to this field-corn acreage, 100 acres owned by near-by farmers were husked on a share basis. Total bushelage 1,774, which was traded on the cob for 16,344 pounds corn meal and 5,000 pounds oatmeal.

³ Yield figures do not include 2,139 pounds of sprouts.

⁴ Crop failed due to poor location and dry season. Total plantings 191.3 acres. Total acres used 184.3.

The experience with the cooperative gardens in 1932 brought out the following points which are of importance in carrying out such a program. It was found that plantings should be planned so that regular produce distributions may be made as soon as growing conditions will permit, and, in order to secure a more equal distribution of produce among the men, no one should be allowed to start on the job after heavy daily distributions are under way. Plantings of navy beans and of field corn were found not to be economically sound even though dry beans and corn meal are staple articles of diet, as the cost of raising and preparing the crop for use more than offsets the value of the yield. Machine planting, power spraying, and machine digging, though costly, were found to be advisable where large acreages of potatoes are planted because of the increased yield and thorough harvesting. It appears true that the majority of men with industrial training, even without farming experience, adapt themselves readily to mass gardening as they know how to absorb instructions. The practical limit for effective supervision and work on 200 acres of plantings was found to be between 125 and 150 men per day. On this size program it is said that one day's work a week from May to October, inclusive, will provide a man with more than a ton of produce.

The company plans to sponsor a similar garden program for 1933 which will provide for the families for a 9-month period. It was found that the element of waste made it undesirable to try to provide these

foods for a whole year, even though some families do conserve through canning a large part of the produce which lends itself to canning, using the nonpreservable vegetables during the summer months, as others allow the excesses beyond their current food requirements to spoil. The new program will provide for a maximum of 750 workers, and it is hoped the maximum force will be reached by August 1, which will insure sufficient labor for planting, cultivation, and harvesting. The fact that because of the newness of the project men were slow in making their applications and many did not start before harvesting began last fall resulted in only 549 out of the total number of 936 men who had worked at some time on the gardens receiving part of the final distribution. Although all received equal values for the time worked through the daily distributions, the final allotment in larger quantities to those who had worked for the longer periods made their share appear relatively larger and an unbalanced condition of this sort, it is said, is conducive to dissatisfaction. The estimated amounts available in 1933 as a result of the plantings which have been planned will meet the weekly vegetable needs of these workers and their families on approximately the same basis as the needs which have been determined by the best dietary authorities. The project, in addition to supplying so large a part of the food needs of the workers, had the added value, it is said, of improving both their mental and physical health through the stimulus of being engaged in productive work and the healthful effects of work in the open air.

Conditions in Families of the Unemployed in Philadelphia, May, 1932

SINCE 1929 the industrial research department of the Wharton School of Finance and Commerce, University of Pennsylvania, has conducted annually an unemployment survey in Philadelphia. These surveys cover small sample sections in various parts of Philadelphia, but it is stated that a check of these sample areas with the 1930 census indicates that the persons and families covered in the surveys are representative of the city's whole population. At the time the unemployment survey of May, 1932, was being planned it was decided to make also a survey of family conditions. The 35,471 families included in the unemployment investigation, however, were too many to interview in regard to their detailed conditions, so a sample of 9,591 families was selected as reasonably representative of the larger group, which in turn, as said above, was representative of the city as a whole. The findings of this survey made by the industrial research department in cooperation with the service committee for professional and business women are presented in Special Report No. 5 (mimeographed), February 23, 1933, of the department.

Table 1 shows the number and per cent of families included in the survey who were in distress and the reasons for such distress, also the estimated number of families in the city suffering from each kind of distress, on the assumption that the findings of the survey are representative of Philadelphia as a whole.

TABLE 1.—NUMBER AND PER CENT OF FAMILIES IN DISTRESS IN PHILADELPHIA, MAY, 1932, BY KIND OF DISTRESS

Kind of distress	Families in distress		
	Disclosed by survey		Estimated number in city
	Number	Per cent	
Insufficient food	997	10.4	47,800
Insufficient clothing	824	8.6	39,500
Insufficient heat	1,112	11.6	53,300
Evicted for unpaid rent	349	3.6	16,500
Lack of medical attention	348	3.6	16,800
Loss of home ownership	340	3.6	16,700
Loss of furniture	110	1.1	5,300
Total in distress	3,434	35.8	164,700
No distress	6,157	64.2	295,300
Total, all families	9,591	100.0	460,000

Insufficient heat was reported when the family was found to have no cooking heat or was obliged to wear extra wraps in the home. Many houses had no heat at all except while meals were being cooked. Other families had to use their neighbors' stoves to cook the meager food supplied them by relatives, friends, or relief organizations. Some families had to remain in bed a substantial part of the colder days to keep warm.

Of the 9,591 families covered by the investigation, 1,478 or 15.4 per cent had insufficient food, clothing, or home heat when the survey was made. If conditions in these families were representative of conditions throughout Philadelphia there were in May, 1932, approximately 71,000 families in that city with inadequate food, clothing, or home heat. Many families were suffering from two of these three types of distress and there were other families inadequately provided with all three necessities.

Based on the survey figures, it was estimated that in Philadelphia, May, 1932, about 48,000 families did not have enough food to prevent actual hunger among family members and approximately 39,500 families had members who "had no shoes or lacked other items of clothing essential to body comfort."

Lack of needed medical attention was reported by 3.6 per cent of the families surveyed. This percentage represents an estimated 17,000 families in the city. It may be asked why a family should lack medical care when free attention is obtainable at several hospitals and clinics in the city. The answer is that many families have no means of transportation; others do not know of the free service available; some have never had to rely on free medical attention and are reluctant to seek it for the first time; and finally, the hospitals and clinics hesitate to grant free service to families that are not pauperized. Families in this latter group present the most serious problem of all. Many of these families could pay for needed medical attention, but only by foregoing other needs that they consider more essential. As a consequence they postpone obtaining the needed medical attention, hoping, in many cases vainly, that a few months later the family will be able to afford medical attention without so great a sacrifice of other needs.

In Table 2 the percentage and number of families who received and gave specified types of help during the depression are reported. It will be noted that 19.7 per cent of the families had spent all their savings, that 18.4 per cent directly helped relatives or friends, and

that 9.8 per cent shared their homes with others. Of the group suffering from insufficient food, clothing, or heat, 39 per cent were reported as unable to pay store bills.

TABLE 2.—SOURCES AND FORMS OF ASSISTANCE RECEIVED AND AID GIVEN BY FAMILIES IN PHILADELPHIA DURING THE DEPRESSION

Source and form of assistance received and help given	Total families		Families with—					
			Insufficient food, clothing, or heat		Other distress		No distress	
	Per cent based on survey	Estimated number in city	Per cent based on survey	Estimated number in city	Per cent based on survey	Estimated number in city	Per cent based on survey	Estimated number in city
<i>Source of assistance</i>								
Borrowed from—								
Relatives and friends.....	17.6	80,874	34.4	24,369	38.5	36,128	6.9	20,377
Other sources.....	6.8	31,278	13.9	9,847	15.6	14,639	2.3	6,792
Unpaid store bills.....	15.2	70,132	39.0	27,628	28.3	26,557	5.4	15,947
Received help from—								
Relatives and friends.....	13.4	61,440	25.5	18,064	39.3	36,879	2.2	6,497
Welfare agencies.....	23.2	106,794	58.1	41,158	69.0	64,750	.3	886
Spent savings—								
All.....	19.7	90,695	28.4	20,119	25.8	24,211	15.7	46,365
Part.....	14.0	64,297	4.1	2,904	5.0	4,692	19.2	56,701
No savings.....	22.5	103,520	34.1	24,156	29.5	27,683	17.5	51,681
Total.....	100.0	460,000	100.0	70,840	100.0	93,840	100.0	295,320
<i>Kind of help received</i>								
Money.....	5.6	25,546	15.6	11,051	12.3	11,542	1.0	2,953
Food.....	23.6	108,494	60.5	42,858	69.0	64,730	.3	886
Clothing.....	3.0	13,594	9.5	6,730	7.0	6,569	.1	295
Work relief.....	.6	2,767	1.9	1,346	1.2	1,126	.1	295
Other help.....	3.9	17,788	6.9	4,888	10.6	9,947	1.0	2,953
Total.....	100.0	460,000	100.0	70,840	100.0	93,840	100.0	295,320
<i>Kind of help given others</i>								
Direct help to relatives or friends.....	18.4	84,585	11.2	7,934	9.3	8,727	23.0	67,924
Shared home with others.....	9.8	44,921	13.9	9,847	12.2	11,448	8.0	23,626
Total.....	100.0	460,000	100.0	70,840	100.0	93,840	100.0	295,320

According to Table 3, the average weekly income of all the surveyed families specifying income was \$14.09 while that of the families with insufficient food, clothing, or heat was \$3.98. However, the group with no distress averaged only \$19.94.

TABLE 3.—PER CENT OF FAMILIES SURVEYED HAVING SPECIFIED WEEKLY INCOME IN PHILADELPHIA, MAY, 1932¹

Weekly income	Families with—			
	Insufficient food, clothing, or heat	Other distress	No distress	Total
	Per cent	Per cent	Per cent	Per cent
No income	59.2	48.6	13.3	28.7
Up to \$3	6.4	8.4	1.0	3.6
\$3.01 to \$5	6.2	7.5	2.2	4.0
\$5.01 to \$10	13.2	16.5	11.4	12.8
\$10.01 to \$15	6.5	7.7	13.4	11.0
\$15.01 to \$20	4.6	4.6	16.1	11.6
\$20.01 to \$25	2.4	3.3	12.7	8.9
\$25.01 to \$35	1.2	2.2	17.7	11.6
\$35.01 to \$50	.3	1.0	8.8	5.7
\$50.01 to \$75	0	.2	2.6	1.6
\$75.01 to \$100	0	0	.6	.4
Over \$100	0	0	.2	.1
	100.0	100.0	100.0	100.0
Average income	\$3.98	\$5.36	\$19.94	\$14.09

¹ Includes only families specifying income.

The average percentage decrease in income for all families at the time of the survey compared with their income when all employable members were employed was 71.6, as shown in Table 4. The average decrease in income for the group with insufficient food, clothing, or heat was 88.8 per cent.

TABLE 4.—PRESENT (MAY, 1932) FAMILY INCOME COMPARED WITH INCOME WHEN ALL EMPLOYABLE MEMBERS WERE LAST EMPLOYED

Income per week	Families with—							
	Insufficient food, clothing, or heat		Other distress		No distress		Total	
	Specify- ing de- creases in income	Average decrease in in- come						
	Per cent	Per cent						
None	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to \$3	100.0	90.0	100.0	89.0	100.0	85.0	100.0	88.9
\$3.01 to \$5	100.0	84.0	94.9	84.0	97.0	78.0	97.1	82.0
\$5.01 to \$10	97.4	71.0	100.0	73.0	96.8	67.0	97.8	69.4
\$10.01 to \$15	100.0	56.0	98.9	59.0	96.7	51.0	98.4	53.0
\$15.01 to \$20	100.0	45.0	92.2	49.0	94.0	47.0	94.3	47.0
\$20.01 to \$25	100.0	42.0	100.0	45.0	91.8	37.0	93.0	38.0
\$25.01 to \$35	90.0	34.0	91.3	39.0	89.9	34.0	90.0	34.2
\$35.01 to \$50	100.0	21.0	88.9	36.0	80.9	32.0	81.4	32.0
\$50.01 to \$75			100.0	58.0	87.7	31.0	88.0	31.8
\$75.01 to \$100					78.6	27.0	78.6	27.0
Over \$100					75.0	47.0	75.0	47.0
Total	98.9	88.8	98.0	87.6	92.3	57.6	94.0	71.6

Of all the families included in the survey, 45.8 per cent owned or were purchasing homes. About one-fourth of the group of families with insufficient food, clothing, or heat owned their homes. Of the families in this group who owned or were buying homes, 90.5 per cent had mortgages, 71.5 per cent were in arrears in their mortgage payments, and 64.7 per cent were behind in their taxes. Slightly over 77 per cent of the renters in the same group were back in their rent.

According to the report "our public and governmental relief has fallen far short, both extensively and intensively, of meeting the needs of the people. Distress is much more prevalent now than it was in May, 1932, and the lower income groups are much less able to help each other than they were then."

Report of South African Unemployment Investigation Committee

THE South African Government, faced with the necessity of dealing with widespread unemployment and destitution, appointed a committee to consider and report upon permanent measures of relief or, preferably, of prevention, which could be set up after the immediate crisis is over. The committee was to report especially upon the advisability of creating "a special permanent fund for preventing and relieving acute and prolonged unemployment created by any cause which would bring about such depression that a considerable proportion of the workers would be thrown out of employment." If the creation of such a fund should appear desirable it should further report upon the proper amount and the means by which it should be raised, the manner of administration, the purposes to which it should be applied, the extent and manner of cooperation between the general government and the local authorities, and similar matters. The committee held public hearings, collected the views of organized employers and workers, consulted public bodies and organizations interested in the care of the unemployed, and in general sought to secure a broad view of the situation. A report containing their conclusions has recently been issued.

Reviewing the industrial development of South Africa, the committee concludes that unemployment, to some extent, is a permanent feature of its industrial system, and that while depressions like the present enormously increase its amount and severity, it is bound to become more and more serious, even in normal times.

Most of the witnesses, particularly those representing workers' organizations, were emphatic that, as a result of the rationalization of industry, the ceaseless introduction of labor-saving devices, and the natural growth of the population, unemployment should be regarded not only as a permanent feature of the social structure, but as an ever-growing national evil. What might have been regarded as an abnormal state of unemployment, say 10 years ago, may have to be regarded now as normal, and in 10 years' time the present state of unemployment may in all likelihood be regarded as nothing unusual.

There is little to be hoped for from a policy of trying to direct the superfluous workers to the land, for they have not the necessary capital, training, and skill to become independent farmers, and, since the agricultural development of the Union has been based upon the large supply of exceedingly cheap native labor, there is no opening for them as farm hands.

It has been suggested that pressure should be brought to bear upon and appeals should be made to farmers to employ "poor whites" instead of native or colored labor, but we find, after careful investigation, that as a rule it is not economically possible for farmers to employ European labor at a living wage. In some instances a European may be employed as foreman, but in the great majority of cases the farmer is forced to be his own foreman, as the uncertain revenue derived from his farming operations does not warrant the payment of a foreman's salary.

Moreover, the substitution of white for colored laborers would, of course, change only the incidence of the unemployment problem, not its scope.

Former commissions have dealt with the question of unemployment insurance and have held that owing to the situation created by the large employment of natives, its establishment is hardly practicable. This conclusion the present committee indorses.

Reviewing the whole situation, the committee concludes that there is ample reason for creating a special permanent fund for preventing and relieving acute and prolonged unemployment, and that while this should be primarily for meeting depressions like the present, its use should not be confined to them.

Statistics collected by the department of labor indicate that during prosperous years it was found necessary to provide relief works for some thousands of men who were not able to secure work on their own. From this it would appear that even when trade, industry, and agriculture are flourishing, there may be such a degree of unemployment in some areas that it would be necessary for resort to be made to the fund.

The fund, it was decided, should be not less in amount than £5,000,000 and should be appropriated from the general revenue. Two members dissented from this recommendation, holding that it should be raised by means of a tax on wages, salaries, and income generally of approximately 3d. on the pound on all income of not less than £1 a week. Four members held that the amount of the fund should be "not less than £3,000,000, contingent upon not less than a further £1,000,000 being provided annually for public buildings." The recommendation as to the amount was, therefore, carried by a vote of 5 to 4, and that as to the method of raising the fund by 7 to 2.

The fund should be administered by a board of five, representing the Government, the rural community, the employees, the employers, and the local authorities. The members should be appointed by the governor general for a term of four years and should be eligible for reappointment. The fund should be used to make grants to Government departments, local authorities, public bodies, and provincial administrations, in order to aid in carrying out public works for the purpose of preventing or relieving unemployment during periods of severe depression.

INDUSTRIAL ACCIDENTS

Accidents in Manufacturing Industries, 1926 to 1931

THE results of the Bureau of Labor Statistics' annual survey of accidents in manufacturing industries for 1931 show a substantial decrease in accident frequency and severity rates for that year, as compared with 1930. An average of 18.85 accidents occurred in the combined industries during 1931 for every 1,000,000 man-hours worked, a decrease in the frequency rate of 18.3 per cent. An average of 2.59 days were lost, including scheduled allowances for deaths and permanent disabilities, for every 1,000 man-hours worked, a decrease in the severity rate of 8.2 per cent.

Distribution of the accident frequency and severity rates, for the combined manufacturing industries in 1931, by extent of disability, is shown in Table 1, with comparative yearly data for the five previous years, 1926 to 1930, and the yearly percentage of change. These rates were computed from the records of the establishments in all of the States covered by the survey, and weighted according to the total number of wage earners employed in each industrial group, as given in the reports of the United States Bureau of the Census.

TABLE 1.—ACCIDENT FREQUENCY AND SEVERITY RATES IN MANUFACTURING INDUSTRIES, 1926 TO 1931 (WAGE EARNERS ONLY)

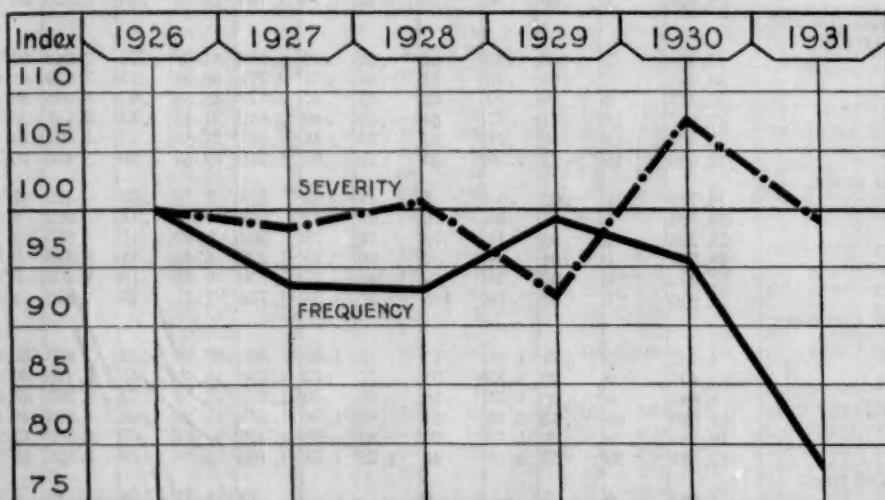
Year	Deaths		Permanent disability		Temporary disability		Total			
	Frequency rate	Severity rate	Frequency rate	Severity rate	Frequency rate	Severity rate	Frequency		Rate	Per cent of change, as compared with preceding year
							Rate	Per cent of change, as compared with preceding year		
1926	0.16	0.98	1.27	1.18	22.73	0.46	24.16	-----	2.62	-----
1927	.17	1.05	1.22	1.12	21.21	.41	22.60	-6.5	2.58	-1.5
1928	.18	1.08	1.32	1.16	21.02	.40	22.52	-.4	2.64	+2.3
1929	.15	.91	1.38	1.12	22.45	.40	23.98	+6.5	2.43	-8.0
1930	.17	1.06	1.41	1.34	21.50	.42	23.08	-3.8	2.82	+16.0
1931	.15	.90	1.30	1.35	17.40	.34	18.85	-18.3	2.59	-8.2

As shown in the table, the average frequency rate for the combined industries declined from 24.16 in 1926 to 22.52 in 1928, but increased to 23.98 in 1929, then declined again and reached the lowest level (18.85) in 1931, a decrease for the period of 22 per cent. The average severity rate declined and advanced alternately, from 2.62 in 1926 to 2.59 in 1931, a decrease for the period of 1 per cent.

The following chart shows the trend of the average frequency and severity rates for the combined manufacturing groups during the 6-year period, 1926 to 1931.

These rates differ somewhat from the rates published by the National Safety Council in the 1932 edition of its *Accident Facts*. The differences are presumably due mainly to the difference in industries, plants, and occupations covered in the two surveys. The report of the National Safety Council covers the experience of its membership establishments, all of which are presumably interested and active in safety promotion, and consequently may present more favorable rates than the survey by the Bureau of Labor Statistics, the coverage of which is probably more general in character. Also, the National Safety Council includes in its figures industries other than manufacturing, and clerical employees as well as wage earners,

Trend of Accident Frequency and Severity Rates in Manufacturing Industries, 1926-1931



whereas those of the Bureau of Labor Statistics are limited to wage earners.

Individual industry rates, by extent of disability and by years, are shown in detail in Table 2. These rates were computed from records of establishments in the States for which all accidents resulting in disability extending beyond the day of injury are reported. It has been found that this selection constitutes a fairly representative cross section for each of the selected industries, and that the rates for the various industries are comparable. It must, however, be taken into consideration that, in using only such records, several important States are omitted from this compilation and that neither the number of workers nor the number of accidents in any one industry is comparable with the same item for another industry.

The industrial accident surveys of the bureau covered approximately 10 per cent of the total wage earners in the respective industrial groups in 1926, 21 per cent in 1927, 21 per cent in 1928, 25 per cent in 1929, 37 per cent in 1930, and 44 per cent in 1931.

TABLE 2.—NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR WAGE EARNERS IN SPECIFIED INDUSTRIES, 1926 TO 1931
 [Frequency rates are based on 1,000,000 hours' exposure, severity rates on 1,000 hours' exposure]

Industry and year	Number of full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Agricultural implements:													
1926	5,126	0			39	2.54	3.08	554	36.03	0.58	503	38.57	3.66
1927	7,282	6	0.27	1.65	28	1.28	1.10	598	27.37	.46	632	28.92	3.21
1928	7,134	3	.14	.84	21	.98	.48	662	30.94	.47	686	32.06	1.79
1929	7,628	4	.18	1.05	68	2.97	3.38	800	34.96	.51	872	38.11	4.94
1930	5,855	4	.23	1.37	40	2.28	2.72	514	29.25	.55	558	31.76	4.64
1931	3,181	3	.31	1.89	27	2.83	2.34	237	24.83	.45	267	27.97	4.68
Automobiles:													
1926	28,360	10	.12	.71	180	2.12	5.19	2,145	25.21	.35	2,335	27.45	6.25
1927	48,886	7	.05	.29	142	.97	1.27	1,852	12.63	.23	2,001	13.65	1.79
1928	52,269	9	.06	.34	229	1.46	1.10	3,267	20.83	.33	3,505	22.35	1.77
1929	58,127	14	.08	.48	299	1.71	1.31	3,657	20.97	.32	3,970	22.76	2.11
1930	32,574	10	.10	.61	146	1.49	1.43	1,372	14.04	.30	1,528	15.63	2.34
1931	28,626	8	.00	.56	129	1.50	1.16	1,193	13.80	.26	1,330	15.48	1.98
Automobile tires and rubber goods:													
1926	17,951	3	.06	.33	32	.59	.46	2,913	54.07	.72	2,948	54.72	1.51
1927	30,696	7	.08	.46	61	.66	.51	3,771	40.95	.73	3,839	41.60	1.70
1928	36,377	9	.08	.49	62	.57	.51	3,877	35.53	.62	3,948	36.18	1.62
1929	35,967	12	.11	.67	64	.59	.40	2,642	24.49	.43	2,718	25.19	1.50
1930	26,301	8	.10	.61	42	.53	.48	1,781	22.57	.47	1,831	23.20	1.56
1931	23,086	15	.22	1.30	55	.79	.65	1,346	19.43	.40	1,416	20.44	2.35
Boots and shoes:													
1926	14,779	1	.02	.14	5	.11	.05	316	7.13	.09	322	7.26	.28
1927	39,763	1	.01	.05	69	.58	.47	892	7.48	.14	962	8.07	.66
1928	35,396	2	.02	.11	79	.74	.75	904	8.52	.17	985	9.28	1.03
1929	48,258	1	.01	.04	87	.60	.49	1,228	8.48	.14	1,316	9.09	.67
1930	57,683	4	.02	.14	69	.40	.27	1,130	6.53	.16	1,203	6.95	.57
1931	74,956	7	.03	.19	115	.51	.38	1,734	7.71	.13	1,856	8.25	.70
Brick, tile, and terra cotta:													
1926	4,703	3	.21	1.28	11	.78	1.67	809	57.34	.92	823	58.33	3.87
1927	13,497	9	.22	1.33	31	.77	.75	1,436	35.46	.55	1,476	36.45	2.63
1928	9,685	8	.28	1.65	16	.55	.59	1,237	42.56	.73	1,261	43.39	2.97
1929	11,629	15	.43	2.58	31	.89	1.04	1,578	45.29	.65	1,624	46.61	4.27
1930	10,289	8	.26	1.55	25	.81	.95	1,270	41.14	.67	1,303	42.21	3.17
1931	12,581	20	.53	3.18	46	1.22	1.63	1,460	38.69	.69	1,526	40.44	5.50
Carpets and rugs:													
1926	1,482	0			0			19	4.31	.08	19	4.31	.08
1927	15,321	1	.02	.13	12	.26	.25	214	4.66	.11	227	4.94	.49
1928	14,091	4	.09	.57	25	.59	.67	231	5.47	.14	260	6.15	1.38
1929	14,286	4	.09	.56	31	.72	.89	358	8.34	.12	393	9.15	1.57
1930	12,241	1	.03	.16	25	.68	.41	277	7.54	.15	303	8.25	.72
1931	9,015	1	.03	.22	24	.89	1.03	265	9.80	.18	290	10.72	1.43
Chemicals:													
1926	3,117	0			2	.21	.06	124	13.26	.25	126	13.47	.31
1927	8,540	5	.20	1.17	17	.66	.68	308	12.02	.22	330	12.88	2.07
1928	12,461	20	.53	3.21	35	.94	1.33	735	19.66	.45	790	21.13	4.99
1929	15,506	7	.15	.90	57	1.23	1.00	836	17.97	.27	900	19.35	2.17
1930	14,705	12	.27	1.63	48	1.09	1.21	718	16.28	.38	778	17.64	3.22
1931	14,970	12	.27	1.60	34	.76	1.04	465	10.35	.23	511	11.38	2.87
Cotton goods:													
1926	44,104	0			23	.17	.14	1,171	8.83	.18	1,104	9.00	.32
1927	56,903	6	.04	.21	57	.33	.33	2,258	13.23	.27	2,321	13.60	.81
1928	63,952	5	.03	.16	82	.43	.35	2,332	12.15	.23	2,419	12.61	.74
1929	69,694	10	.05	.20	125	.60	.53	3,002	14.36	.28	3,137	15.01	1.10
1930	74,441	8	.04	.21	125	.56	.52	2,967	13.28	.26	3,100	13.88	.99
1931	131,401	7	.02	.11	128	.32	.29	3,483	8.84	.16	3,618	9.18	.56
Electrical machinery, apparatus, and supplies:													
1926	18,137	2	.04	.22	56	1.03	.64	1,095	21.13	.37	1,153	22.20	1.23
1927	60,927	11	.06	.36	210	1.15	1.02	2,611	14.28	.36	2,832	15.49	1.74
1928	61,634	10	.05	.32	183	.99	.80	2,181	11.80	.32	2,374	12.84	1.44
1929	85,201	12	.05	.28	388	1.52	.12	3,502	13.70	.27	3,902	15.27	.67
1930	64,468	16	.08	.50	257	1.33	1.02	2,995	15.49	.39	3,268	16.90	1.91
1931	67,371	13	.06	.38	189	.94	.76	1,957	9.68	.22	2,159	10.68	1.36
Fertilizers:													
1926	1,300	1	.26	1.54	2	.51	.28	174	44.54	.88	177	45.31	2.70
1927	2,498	3	.40	2.40	7	.93	1.70	261	34.83	.66	271	36.16	4.85
1928	4,341	10	.77	4.60	13	1.00	.91	476	36.54	.77	499	38.31	6.28
1929	5,167	9	.58	3.48	13	.84	1.14	567	36.57	.69	589	37.99	5.31
1930	5,275	7	.44	2.66	17	1.08	2.12	470	29.71	.51	494	31.23	5.29
1931	3,852	4	.35	2.08	13	1.12	1.24	369	31.92	.56	386	33.30	3.88

TABLE 2.—NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR WAGE EARNERS IN SPECIFIED INDUSTRIES, 1926 TO 1931—Continued

[Frequency rates are based on 1,000,000 hours' exposure, severity rates on 1,000 hours' exposure]

Industry and year	Number of full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Flour, feed, and other grain-mill products:													
1926	3,880	4	0.34	2.06	15	1.20	1.94	310	26.57	0.50	329	28.20	4.50
1927	7,107	5	.23	1.41	25	1.17	.90	477	22.37	.41	507	23.77	2.72
1928	9,355	5	.18	1.07	24	.86	.94	845	30.10	.54	874	31.14	2.55
1929	10,863	7	.21	1.29	31	.95	1.00	1,202	36.89	.62	1,240	38.05	2.91
1930	10,308	9	.29	1.75	54	1.75	2.61	1,135	36.70	.61	1,198	38.74	4.97
1931	12,672	7	.18	1.10	69	1.82	2.78	1,107	29.12	.51	1,183	31.12	4.39
Foundry and machine-shop products:													
1926	27,069	17	.21	1.26	85	1.05	1.05	3,193	39.32	.58	3,295	40.58	2.89
1927	72,963	38	.17	1.04	338	1.54	1.33	6,356	29.05	.51	6,732	30.76	2.88
1928	66,276	29	.15	.87	301	1.51	.82	5,763	28.98	.21	6,093	30.64	1.90
1929	70,850	23	.11	.65	339	1.59	1.39	6,799	31.99	.48	7,161	33.69	2.52
1930	66,933	32	.16	.96	320	1.59	1.27	4,969	24.75	.46	5,321	26.50	2.69
1931	52,274	39	.25	1.49	272	1.73	1.51	3,781	24.11	.44	4,092	26.09	3.44
Furniture:													
1926	11,726	0	—	—	60	1.71	1.44	795	22.60	.53	855	24.31	1.97
1927	21,918	5	.08	.46	124	1.88	1.43	1,296	19.70	.30	1,425	21.66	2.19
1928	22,020	7	.11	.63	90	1.36	.98	1,192	18.04	.31	1,289	19.51	1.92
1929	24,345	8	.11	.66	160	2.19	1.54	1,704	23.34	.31	1,872	25.64	2.51
1930	19,969	8	.13	.80	106	1.77	1.37	1,291	21.55	.32	1,405	23.45	2.49
1931	33,389	9	.09	.54	162	1.62	1.37	1,661	16.58	.24	1,832	18.29	2.15
Glass:													
1926	6,717	1	.05	.30	17	.84	1.04	797	39.55	.49	815	40.44	1.83
1927	19,267	14	.24	1.45	24	.42	.35	2,233	38.63	.51	2,271	39.29	2.31
1928	21,107	7	.11	.66	28	.44	.32	2,620	41.38	.55	2,655	41.93	1.53
1929	27,242	14	.17	1.02	43	.52	.36	3,456	29.96	.37	2,513	30.65	1.75
1930	21,692	5	.08	.46	60	.92	.87	1,681	25.84	.40	1,746	26.84	1.73
1931	33,041	16	.16	.97	56	.56	.56	1,560	15.74	.24	1,632	16.46	1.77
Hardware:													
1926	886	0	—	—	5	1.88	.73	75	28.22	.58	80	30.10	1.31
1927	3,764	1	.09	.53	15	1.33	1.02	330	29.22	.44	346	30.64	1.99
1928	4,040	3	.25	1.49	14	1.16	1.00	400	33.01	.55	417	34.42	3.04
1929	4,467	2	.15	.89	28	2.09	1.42	460	34.32	.40	490	36.56	2.71
1930	3,326	1	.10	.60	10	1.00	.35	234	23.45	.31	245	24.55	1.26
1931	3,487	0	—	—	5	.48	.40	233	22.27	.33	238	22.75	.73
Iron and steel:													
1926	160,145	111	.23	1.30	393	.82	.63	9,550	19.87	.26	10,054	20.92	2.28
1927	327,907	204	.21	1.24	647	.65	.59	17,658	17.95	.33	18,509	18.81	2.16
1928	308,066	201	.22	1.30	700	.76	.72	18,171	19.66	.37	19,072	20.64	2.39
1929	403,721	192	.16	.95	956	.79	.69	23,102	19.07	.32	24,250	20.02	1.96
1930	304,958	173	.19	1.14	752	.82	.76	15,290	16.71	.36	16,215	17.72	2.26
1931	207,380	121	.19	1.17	552	.89	.76	10,234	16.45	.37	10,907	17.53	2.30
Leather:													
1926	5,530	2	.12	.72	7	.42	.62	187	11.27	.26	196	11.81	1.60
1927	11,521	3	.09	.52	19	.55	.41	948	27.43	.43	970	28.07	1.36
1928	13,066	2	.05	.31	28	.71	.92	789	20.12	.27	819	20.88	1.50
1929	13,586	3	.07	.44	45	.56	.45	970	23.76	.36	996	24.39	1.25
1930	15,409	4	.09	.52	33	.71	.75	1,084	23.45	.36	1,121	24.25	1.63
1931	13,636	2	.05	.29	30	.73	.57	818	20.00	.33	850	20.78	1.19
Logging:													
1929	16,600	33	.66	3.98	106	2.13	1.77	2,050	41.20	1.06	2,189	43.99	6.81
1930	7,569	31	1.36	8.19	153	6.74	8.32	1,968	86.65	1.98	2,152	94.75	18.49
1931	4,279	20	1.56	9.35	89	6.93	13.00	952	74.15	1.79	1,061	82.64	24.14
Lumber—planing mills:													
1926	5,242	3	.19	1.14	47	2.99	2.15	467	29.70	.65	517	32.88	3.94
1927	9,416	9	.32	1.91	72	2.55	2.64	634	22.44	.57	715	25.31	5.12
1928	12,112	6	.17	.99	118	3.25	2.17	1,162	31.97	.60	1,286	35.39	3.76
1929	14,021	7	.17	1.00	169	4.02	2.85	1,233	29.34	.49	1,409	33.53	4.34
1930	9,650	3	.10	.62	93	3.21	3.07	1,110	38.34	.68	1,206	41.65	4.37
1931	15,729	10	.21	1.27	110	2.33	1.86	928	19.67	.31	1,048	22.21	3.44
Lumber—sawmills:													
1926	5,302	15	.94	5.66	33	2.07	3.28	1,012	63.62	1.57	1,060	66.63	10.51
1927	13,631	22	.54	3.23	130	3.19	3.74	2,386	58.46	1.25	2,538	62.19	8.22
1928	36,724	72	.65	3.92	374	3.39	3.29	5,467	49.63	1.08	5,913	53.67	8.29
1929	20,481	19	.31	1.86	157	2.56	1.78	2,840	46.29	.88	3,016	49.16	4.52
1930	22,002	13	.20	1.18	194	2.94	2.38	2,049	31.04	.65	2,256	34.18	4.21
1931	28,019	26	.31	1.85	278	3.31	4.85	4,128	49.11	.90	4,432	52.73	7.60

TABLE 2.—NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR WAGE EARNERS IN SPECIFIED INDUSTRIES, 1926 TO 1931—Continued

[Frequency rates are based on 1,000,000 hours' exposure, severity rates on 1,000 hours' exposure]

Industry and year	Number of full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Machine tools:													
1926	9,303	3	0.11	0.64	15	0.54	0.32	623	22.32	0.25	641	22.97	1.21
1927	12,207	3	.08	.49	28	.76	.70	780	21.30	.34	811	22.14	1.53
1928	13,074	7	.18	1.07	44	1.12	.90	875	22.31	.40	926	23.61	2.37
1929	16,509	7	.14	.85	49	.99	.74	1,253	25.31	.36	1,309	26.44	1.95
1930	11,121	9	.27	1.62	25	.75	.53	698	20.92	.43	732	21.94	2.58
1931	5,860	1	.06	.34	12	.68	.68	260	14.79	.35	278	15.53	1.37
Paper and pulp:													
1926	16,770	7	.14	.83	36	.72	.83	1,562	31.05	.51	1,605	31.91	2.17
1927	26,074	18	.23	1.38	126	1.61	1.62	2,224	28.43	.60	2,368	30.27	3.60
1928	27,158	14	.18	1.03	154	1.89	2.04	2,284	28.03	.56	2,452	30.10	3.63
1929	34,632	14	.13	.81	193	1.86	1.71	2,900	27.91	.48	3,107	29.90	3.00
1930	31,662	20	.21	1.26	181	1.91	1.82	2,799	29.47	.57	3,000	31.59	3.65
1931	39,850	25	.21	1.25	175	1.46	1.44	3,065	25.80	.45	3,285	27.47	3.14
Petroleum refining:													
1926	3,783	0			6	.53	.32	99	8.72	.20	105	9.25	.52
1927	19,951	25	.42	2.51	67	1.12	1.12	1,979	33.04	.52	2,071	34.58	4.15
1928	22,401	25	.37	2.23	46	.69	.42	1,310	19.49	.37	1,381	20.55	3.02
1929	25,849	28	.36	2.17	69	.89	.72	1,609	20.76	.34	1,706	22.01	3.23
1930	28,371	36	.42	2.54	136	1.60	2.85	2,497	20.34	.60	2,669	31.36	5.99
1931	26,011	37	.47	2.84	73	.94	1.21	1,722	22.07	.35	1,832	23.48	4.40
Pottery:													
1926	3,946	1	.08	.51	2	.17	.36	142	12.00	.25	145	12.25	1.12
1927	6,053	2	.11	.66	6	.33	.18	229	12.61	.17	237	13.05	1.01
1928	7,449	3	.13	.80	7	.32	.46	299	13.38	.26	309	13.83	1.52
1929	9,275	1	.08	.21	9	.32	.21	445	15.97	.27	455	16.32	.69
1930	7,558	0			9	.40	.50	329	14.51	.27	338	14.91	.77
1931	8,303	2	.08	.48	3	.12	.28	303	12.16	.19	308	12.36	.95
Shipbuilding, steel:													
1926	745	0			2	.80	1.92	123	55.03	.96	125	55.92	2.88
1927	6,011	5	.28	1.66	36	2.00	2.58	798	44.25	.76	839	46.53	5.00
1928	9,133	3	.11	.66	43	1.57	1.26	448	16.35	.48	494	18.03	2.40
1929	13,642	10	.24	1.46	47	1.15	.80	910	22.20	.34	967	23.59	2.60
1930	16,422	11	.22	1.34	87	1.77	1.61	1,363	27.67	.50	1,461	29.66	3.54
1931	13,967	9	.21	1.29	47	1.12	.92	1,490	35.56	.62	1,546	36.89	2.83
Slaughtering and meat packing:													
1926	19,809	8	.13	.81	93	1.56	1.50	2,935	49.30	.66	3,036	51.08	2.97
1927	36,222	15	.14	.83	136	1.25	1.00	3,810	35.05	.54	3,961	36.44	2.37
1928	38,674	15	.13	.78	127	1.09	.71	5,080	43.78	.63	5,222	45.00	2.12
1929	48,116	23	.16	.96	187	1.29	.81	6,449	44.67	.57	6,659	46.12	2.34
1930	40,648	29	.24	1.43	202	1.66	1.52	4,466	36.62	.58	4,697	38.52	3.53
1931	44,192	19	.14	.86	237	1.79	1.56	4,219	31.82	.45	4,475	33.75	2.87
Stamped and enamelled ware:													
1926	6,105	0			28	1.52	1.15	893	48.76	.48	921	50.28	1.63
1927	10,004	2	.07	.40	36	1.20	.70	807	26.89	.35	845	28.16	1.45
1928	8,068	2	.08	.50	50	2.07	1.20	688	28.42	.44	740	30.57	2.14
1929	8,537	3	.12	.70	77	3.00	2.07	703	27.42	.42	783	30.54	3.19
1930	6,587	6	.30	1.82	33	1.67	1.53	354	17.92	.32	393	19.89	3.67
1931	9,021	2	.07	.44	51	1.88	1.60	605	22.36	.34	658	24.31	2.38
Steam fittings, apparatus and supplies:													
1926	2,640	0			4	.50	1.32	248	31.31	.39	252	31.81	1.71
1927	15,652	2	.04	.25	25	.53	.32	1,057	22.51	.33	1,084	23.08	.90
1928	8,935	4	.15	.90	42	1.57	1.25	858	32.00	.55	904	33.72	2.70
1929	9,538	2	.07	.42	30	1.05	.85	863	30.12	.43	895	31.24	1.70
1930	6,620	3	.15	.91	17	.86	.62	583	29.35	.52	603	30.36	2.05
1931	5,768	2	.11	.69	18	1.04	1.05	382	22.08	.44	402	23.23	2.18
Stoves:													
1926	4,379	0			21	1.60	1.93	532	40.50	.62	553	42.10	2.55
1927	7,515	1	.04	.27	25	1.11	1.04	1,002	44.44	.62	1,028	45.59	1.93
1928	7,880	3	.13	.76	28	1.18	.70	934	39.51	.55	965	40.82	2.01
1929	9,645	3	.10	.62	46	1.59	1.39	1,196	41.38	.53	1,245	43.07	2.54
1930	7,460	2	.09	.54	22	.98	.94	751	33.56	.66	775	34.63	2.14
1931	10,019	7	.23	1.40	32	1.06	1.12	640	21.30	.41	679	22.50	2.93

TABLE 2.—NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR WAGE EARNERS IN SPECIFIED INDUSTRIES, 1926 TO 1931—Continued

[Frequency rates are based on 1,000,000 hours' exposure, severity rates on 1,000 hours' exposure]

Industry and year	Number of full-year workers	Death		Permanent disability		Temporary disability		Total			
		Number of cases	Frequency rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate
Woolen goods:											
1926	7,757	1	0.04	0.26	3	0.13	0.06	252	10.84	0.30	256
1927	15,796	1	.02	.13	10	.21	.17	444	9.37	.15	455
1928	22,607	0			23	.34	.29	762	11.23	.18	785
1929	23,189	2	.03	.17	25	.36	.33	1,024	14.74	.25	1,051
1930	19,903	1	.02	.10	12	.20	.17	649	10.87	.21	662
1931	40,792	3	.03	.15	42	.34	.30	1,005	8.21	.15	1,050
All groups:											
1926	440,901	193			1,222			33,115			34,530
1927	927,292	431			2,523			59,649			62,603
1928	955,485	488			2,986			65,849			69,323
1929	1,156,571	489			3,907			78,338			82,734
1930	962,000	474			3,293			58,794			62,561
1931	976,728	447			3,073			51,622			55,142

These surveys covered 29 manufacturing groups for 1926, 1927, and 1928. Separate figures were available in 1929 for logging operations, which were previously included in the classification "lumber—sawmills." Consequently a new classification, "logging," was added in 1929, making 30 groups in all. The separation is noticeable in the accident rates for sawmills, which dropped considerably in 1929 through the elimination of the more hazardous logging operations.

While both frequency and severity rates for the combined groups declined in 1931, as compared with 1930, some of the individual groups show increases in rates. Frequency rates increased 1.30 for boots and shoes, 2.47 for carpets and rugs, 2.16 for fertilizer, 18.55 for sawmills, 7.23 for shipbuilding, and 4.42 for stamped and enameled ware. Decreases for the other 24 groups ranged from 0.15 for automobiles to 19.44 for planing mills. Severity rates increased 0.4 for automobiles; 0.79 for automobile tires; 0.13 for boots and shoes; 2.33 for brick, tile, and terra cotta; 0.71 for carpets and rugs; 0.75 for foundry and machine shop products; 0.4 for glass, and for iron and steel; 5.65 for logging; 3.39 for sawmills; 0.18 for pottery; 0.13 for steam fittings, apparatus, and supplies; 0.79 for stoves; and 0.12 for woolen goods. Decreases for the other 16 groups ranged from 0.34 for furniture to 1.59 for petroleum refining.

HEALTH AND INDUSTRIAL HYGIENE

Health of Insured Wage Earners During 1932

THE report¹ of the Metropolitan Life Insurance Co. concerning the health record in 1932 of the many millions of industrial policyholders of the company indicates that the year's health record, as shown by the mortality records, was the best that has ever been recorded. In view of the large number of industrial policyholders, it is considered that it is safe to say that the death rate of the general population in 1932 reached a new low point, the mortality rate of this group of insured persons having always proved to be an accurate index of health conditions in the general population.

The death rate for 1932 among insured persons was at the unprecedented figure of 8.34 per 1,000 living, at ages 1 and over, the previous minimum, 8.37, having been registered in 1930. During 1932 new minimum records were established for nine important causes of death, namely, typhoid fever, measles, whooping cough, diphtheria, pneumonia, tuberculosis, diarrheal diseases, conditions associated with pregnancy and childbirth, and accidents. Also, among the various causes of accidental death reductions from the previous records were shown for accidental burns, machinery accidents, and drownings.

It is pointed out that the extremely low death rate in 1932 was reached in spite of the unfavorable economic conditions which continued throughout the year and which seriously affected the living standards of industrial workers and their dependents. In spite of the fact, however, that more workers were unemployed than ever before and that they were subject to the worries which unemployment brings, the health of the insured group has been exceptionally good. In discussing the factors which have contributed to this result it is said that the most important cause was the almost entire freedom from serious epidemics during 1932. There was no widespread epidemic of any disease until influenza became prevalent, and in some localities virulent, toward the last of the year. In addition to the freedom from epidemics the weather conditions were good throughout the year and many persons undoubtedly spent more than the usual proportion of their time out of doors. It is said, too, that the depression has unquestionably curbed overeating and overdrinking, and with the reduction in the amount of traffic there have been fewer deaths chargeable to motor vehicle traffic, while the number of industrial accidents has also been reduced as a result of the reduction both in the number of employees and the hours of work. All these factors, it is said, have evidently more than offset the adverse effects of the worry incidental to unemployment and reduced circumstances. Another most important factor in the favorable health showing has been the protection given by the effective functioning of health departments and clinics and the well-organized relief work which has resulted in the conservation of life and health. As a result of economic conditions radical

¹Metropolitan Life Insurance Co. Statistical Bulletin, January, 1933.

curtailment is taking place, however, in the support of health and social agencies, and the report carries the warning that if States and cities continue to cut appropriations for these purposes a serious menace to the preservation of the public health will result.

Lower mortality rates than ever before were registered in 5 of the 12 months of 1932, and during all the other months, with the exception of December, conditions were excellent. In December, however, the mortality from influenza, pneumonia, and the principal degenerative diseases rose sharply, due to the wave of influenza which started on the Pacific coast and swept the country. Although the influenza was in general of a less virulent type than in the great pandemic of 1918-19, the deaths even in a relatively minor outbreak are sufficiently numerous to raise the mortality rate appreciably, and as a consequence the mortality rate for December for all causes of death was 9.4 per 1,000, the highest December figure since 1924.

The actual number of deaths among policyholders aged 1 year and over in 1932 was 139,491, which would have been increased by nearly 70,000 if the 1911 death rate of 12.5 per thousand had prevailed. In comparison with the mortality rates for the general population covering practically the same age groups the rate of decline in mortality among insured wage earners and their dependents during a period of 22 years has been more than twice as great. This saving in lives amounted in 1931 alone to 32,000 lives, or since 1911 to over 464,000 lives, the favorable showing having been brought about largely by the various medical and welfare features carried on by the Metropolitan for the benefit of its policyholders.

The average life span of this group has been extended from an expectation of life at birth of 46.63 years in 1911 and 1912 to 57.90 years in 1931, a gain of 11.27 years, or 24.2 per cent. In the general population, during approximately the same period, the gain was only 6.66 years. This improvement in the expectation of life in the industrial population has brought the life expectancy to within two years of that of the general population, whereas 20 years ago there was a difference of six and one-half years in favor of the general public. The improvement has taken place largely in the younger ages of life where the preventable diseases have been brought so largely under control.

The greatest single improvement during the year was a drop in the tuberculosis death rate to a new low point. The reduction for the year amounted to 8.6 per cent, the largest single decrease in a decade. The tuberculosis death rate is now 70 per 100,000. The 1932 decline in the death rate from this cause effected a saving of 1,100 lives in that year alone.

The mortality rate for the four principal communicable diseases of childhood has dropped 50 per cent in the past 4 years, and almost 70 per cent in 10 years, the rate for each of these diseases in 1932, with the exception of scarlet fever, being the lowest ever recorded. Even diphtheria has become a minor cause of death and will evidently soon be so unimportant that no place need be assigned to it in the statistical tables.

Typhoid fever which has been practically a negligible item for several years was reduced in 1932 to the new low point of 1.7 per 100,000. The mortality rate for pneumonia dropped to a new minimum of 56.8 per 100,000, and the influenza rate was only 17.6. Both of these rates were adversely affected by the prevalence of influenza in

December, but in spite of that fact marked a decided improvement, the influenza rate being well below the average for the last 10 years.

Although the downward trend of deaths from conditions arising out of pregnancy and childbirth has been practically continuous for the past 12 years, the rate is regarded as rather misleading since the drop is due, in part, to the declining birth rate. The ratio of puerperal deaths per 1,000 live births is a much more accurate index of maternal mortality. No data are available for the industrial insurance holders, but in the general population where birth data are available, the death rate per 1,000 live births has shown little variation from year to year, and is far higher than it should be. It is twice as high as in Denmark and 50 per cent above that in England and Wales.

The death rate from alcoholism has declined in the past 3 years from 3.5 per 100,000 in 1929 to 2.4 in 1932, the lowest point reached in this insured group for 10 years. The rate for cirrhosis of the liver, which is often of alcoholic origin, however, has increased in recent years.

In contrast to these lowered death rates, new maximum rates were shown for cancer, diabetes, and diseases of the heart, following the definite upward trend in these diseases which has been manifest for each over a long period. The most disturbing development of 1932 was the decided increase in the cancer mortality, amounting to a 7.8 per cent increase over the 1931 figures and 15.8 per cent in two years. A slow but persistent rise in the cancer death rate has been taking place all over the world for several decades, but it is said to be difficult to assign a reason for this sharp increase during the past two years among insured wage earners. The fragmentary data available do not show that the population at large has experienced a similar rise, although the increase in two years appears to have been greater than the average during the last decade. Among the group of industrial policyholders there has been a shift in the relative age distribution, so that a somewhat larger proportion of the group are in the higher age ranges where most of the deaths from cancer occur. But if this were the reason for the higher rate it would also affect the rates for the several "degenerative" diseases—heart disease, cerebral hemorrhage, and chronic nephritis—which have not, however, increased correspondingly. If the much lower cancer rate of 1911 had prevailed in 1932, 4,026 fewer policyholders would have died of this disease than the 15,394 who actually died during the year, or even if the 1931 rate had prevailed there would have been 1,117 fewer deaths. Among the colored policyholders the rate, which is somewhat higher than among the white, has increased even more sharply. A very marked increase in the diabetes death rate occurred in the past two years, amounting to about 25 per cent. While the rate for this disease has been increasing for the past eight years, the average duration of life of diabetics after the onset of the disease has increased materially since the discovery of insulin. The death rate has shifted to the older age ranges and among persons under 45 years the rate has declined.

Heart disease, since 1922 the leading cause of death, reached a new high point of 157.4 per 100,000 in 1932. This was 4.9 per cent higher than the previous maximum reached in 1931. The rate for this disease is declining at the younger ages, and it is expected that it will continue to decrease as cases of the infectious diseases of childhood.

focal infections, etc., which cause impairments of the heart among children and young persons, are brought under control.

The rise in the suicide death rate in 1932 was less than 6 per cent, which was a smaller increase than had occurred for several years. It is said that the facts show that the rise in the death rate from this cause since 1929 can not be ascribed entirely to the unfavorable economic conditions, as the upward trend has been evident since 1925 and covers, therefore, some of the most prosperous years in the history of the country. Also, the suicide situation as shown by the life insurance records has improved materially in two decades, the suicide rate among Metropolitan industrial policyholders being 10.8 per 100,000 in 1932 as compared with 13.3 in 1911.

Employment of Women in Vitreous Enameling

A RECENT study¹ of the hazards to which women are exposed in vitreous enameling in the stove industry has been made by the United States Women's Bureau. The study covered the enamel departments of 45 factories employing a total of 1,330 women.

The facts in the study were brought out through an inspection of the work places; the determination of the lead content in the enamel used, whenever this was possible; and interviews with a large number of women in their homes to determine, if possible, the effect the work had had upon their health. Altogether 686 women were interviewed. The women employed in enamel work fell into two groups—those applying an enamel spray, not all of which contained lead, and those employed as brushers who remove the excess of enamel after it has dried. The sprayers are subjected to the greatest lead exposure, as much of their work is done on cast iron which is covered with lead enamel, while the brushers are chiefly employed on sheet iron on which a leadless enamel is used. Comparisons were made, therefore, between the sprayers and brushers, as it seemed fair to assume that if there was any marked difference between these two groups of women employed in the same establishments it would be fair to assume that the lead was largely responsible. It must be remembered, however, that the comparison is not between a perfectly normal group and a group exposed to lead but between two groups of varying degrees of exposure. In spite of this fact, it was considered that the figures were decidedly significant. Thus, the report states:

Over 50 per cent more sprayers than brushers complained of a metallic or sweetish taste, indigestion, constipation, and menstrual disturbance. Other findings are that illness among the sprayers with symptoms suggestive of lead poisoning was more prevalent than any other form, although in general industrial experience the common cold always leads in frequency. The sprayers had a higher rate of absences due to ill health than had the brushers, 18.5 per cent of the sprayers who left work doing so because of illness, while only 8.8 per cent of the brushers gave illness as the cause. A rather ominous finding is this: That among the sprayers, those between 16 and 18 years yielded the highest percentage of illness suggestive of lead poisoning.

It has been shown by studies in this country and abroad that there is greater susceptibility to lead poisoning among young persons. In

¹ United States Women's Bureau. The employment of women in vitreous enameling, by Ethel L. Best. Washington, 1932.

the industry studied it was found that more than one-fourth of the women covered were under 20 years of age and more than half were between 20 and 30 years, also an unusually large proportion of the women were married which is regarded as a serious feature of the report as it has been known for more than a century that lead is a race poison.

Of a total of 670 women reporting on whether or not they had symptoms indicative of lead poisoning, 198 reported that they had one or more symptoms. About one-third of these women reported a single symptom, but more than one-fourth reported five or more. Among those reporting three or more symptoms the three occurring most frequently were loss of weight, indigestion, and metallic or sweet taste. There was a considerable difference in the relative frequency of certain symptoms among the sprayers and among the brushers, a very much larger proportion of sprayers having constipation, indigestion, nervousness, menstrual disturbance, metallic or sweet taste, and loss of appetite. Among the brushers the two symptoms which were most common were loss of weight and headache.

The importance of individual susceptibility was shown by the fact that of 196 women having symptoms who reported length of service 99 or slightly over one-half had been employed for less than one year, while only 9 had been employed five years or over. This comparatively small proportion reporting symptoms in the longer-service group is believed to be due to the elimination of the workers more susceptible to lead poisoning, so that those remaining are a picked group as compared with workers in the shorter-service periods.

Working conditions in the plants visited were found to vary from poor to excellent, but in no establishment was the medical service adequate and in only a small minority was there adequate provision for cleanliness. A study was made of the turnover record of the different plants for the year immediately preceding the visit to the plant, and so far as possible these former employees were interviewed to determine their reason for leaving work. It was found that 13.1 per cent of the women who left did so because of poor working conditions—heat, dust, and fear of danger from the dust—as compared with 3.7 per cent of cotton-mill workers who were found in a previous study by the Women's Bureau to have left because of poor working conditions.

Dr. Alice Hamilton in the preface to the report states:

We may as well face the fact that the enameling of stoves, an industry of rapid growth and with probably a great future expansion, is one which subjects a large number of women to the danger of lead poisoning and that these women are not under present conditions efficiently protected against the danger. Even under the best conditions and supervision there will always be some danger; and therefore the most practical suggestion which can be made to the men at the head of the industry is that they substitute leadless enamel for lead enamel, a change which is greatly facilitated by the change from cast iron to sheet metal, which has already been made by a number of manufacturers.

LABOR LAWS AND COURT DECISIONS

Employee Concurrently Negligent Not Precluded from Recovery Under Employer's Liability Act

ON DECEMBER 8, 1927, Joseph Rocco, while riding a track inspector's tricycle in the course of his employment, was killed in a collision with an electrically operated passenger train on the single-track branch of the Lehigh Valley Railroad between Ithaca and Auburn, N. Y. The collision occurred on a blind curve where Rocco could not see the approaching train nor could the motorman see him. However, there was a rule, with which Rocco was familiar, requiring track inspectors to ascertain the whereabouts of the trains before proceeding along the main tracks.

Suit was filed in the New York Supreme Court under the Federal employer's liability act by Mary Rocco, executrix, to recover damages from the railroad company. She alleged that the company was guilty of negligence in that it failed to operate the train at a proper speed, failed to warn Rocco of the train's approach, and failed to provide for him a safe place to work. The defense by the company in the suit was that Rocco assumed the risk and that he was guilty of such negligence as would bar a recovery. Rocco was scheduled each day to precede the morning northbound train, inspecting the track and to return in advance of the afternoon train, going south. On the day of the accident washouts had occurred due to winds and storm and the noon southbound train was over three hours late. Rocco had started on the inspection tour without first ascertaining the whereabouts of the train. The company contended that this disobedience of the rule by Rocco was the primary cause of his death and any negligence of the motorman was immaterial.

The New York Supreme Court rendered a verdict of \$12,096, and this was reduced by the jury 40 per cent on account of Rocco's contributory negligence. The company appealed to the Appellate Division of the New York Supreme Court and the judgment was affirmed. However, the New York Court of Appeals ordered that the complaint be dismissed on the ground that Rocco's negligence was the primary cause of the accident and the executrix could not, therefore, maintain the action. Thereupon, the case was taken to the United States Supreme Court for a review of the ruling of the New York Court of Appeals. The Supreme Court held the cases relied upon by the court of appeals were not controlling in the present case, for in none of the cases "was there any negligence on the part of employees operating the train moving in the opposite direction." Continuing, Mr. Justice Roberts said:

There is no suggestion that the rule upon which the respondent relies forbade Rocco to start on his inspection trip if he ascertained that the approaching train

was within 7 or 8 miles of Ithaca. It was his duty to make his afternoon trip. * * * If he had made inquiry, whether he should await the arrival of the train, or attempt to meet it at some point a short distance from that city, was a matter for his decision. If the rule had forbidden him to leave under circumstances such as inquiry by him would have disclosed, this case would be parallel with those cited. His disregard of the rule was none the less an element in the case.

The jury adjudged him guilty of contributory negligence, and molded its verdict accordingly. But it was open to the jury, as above shown, to find that the motorman of the train was also guilty of negligence which contributed to the collision. Rocco's infraction of the rule was a concurrent cause, but may not in any proper sense be held the primary cause of the accident. His negligence did not preclude a finding by the jury that his death was in part due to the negligence of the respondent's servants. The act imposes liability upon the carrier for injury or death resulting "in whole or in part" from the negligence of any of its officers, agents or employees.

The decision of the appeals court was therefore reversed. (*Rocco v. Lehigh Valley R. Co.*, 53 S. Ct. 343.)

Court Refuses to Render Opinion Regarding Barbers Not Complying with Statute

THE Supreme Court of Mississippi recently refused to render an opinion as to whether barbers can safely continue the practice of barbing without complying with the barbers' statute. (*Baldwyn et al. v. Board of Barber Examiners*, 145 So. 240.)

The Mississippi barbing statute (ch. 118, Laws of 1932) creates a State board of barber examiners, whose duty it is to determine the qualifications of all persons desiring to practice barbing. The first part of the law authorizes the board "to make reasonable rules and regulations for the administration of the provisions of the act"; to "adopt the regulations of the State board of health governing sanitation of barber shops and barber schools; to enter upon and inspect any barber shop or barber school at any time during business hours and * * * report to the State board of health any instances of violations of the sanitary regulations for action by the State board of health." The second part of the act provides that the board may examine any person applying for a license and "determine his fitness to practice barbing," and if he is found qualified, issue him a certificate to that effect. The statute prohibits anyone from practicing without such a certificate. Applicants are required to pay \$5 before they are examined by the board, and if their qualifications are satisfactory, an additional dollar is paid when the certificate is issued.

P. J. Baldwyn and others engaging in the practice of barbing filed suit in the chancery court, Hinds County, Miss., against the board of barber examiners, to secure an injunction restraining the board from enforcing the provisions of the barbers' statute referred to above. They allege that the statute is unconstitutional and that they will suffer irreparable injury if the board is allowed to proceed in the enforcement of the statute. They further state that the board is demanding that they pay certain fees at once and that they submit themselves to another physical examination; that they are "in grave danger of not only being denied the right to pursue their lawful trade but could be and will be robbed of their personal liberties," if the desired injunction is not issued by the court.

The chancery court dismissed the case and upon appeal to the Supreme Court of Mississippi the decision was affirmed. The court said that "the bill fails entirely to allege what proceedings, if any, the appellees have begun or have threatened to begin in order to coerce the appellants into complying with the provisions of the statute." Even though all of the allegations of fact in the bill were true, the court was not sure the appellants would be interfered with if continuing to practice barbering. "If criminal proceedings have been commenced, or threatened to be commenced against them by the appellees," said the court, "that would bring the case within the rule authorizing the issuance of an injunction restraining them, that fact should be specifically averred. The bill simply presents a case wherein an opinion is requested advising the appellants whether they can safely continue to 'practice barbering' without complying with the provisions of the statute. Such opinions the courts should not give." The court, therefore, declined to express its opinion as to the validity of the statute or the rights of the parties.

Hour and Wage Legislation in New South Wales

IN THE autumn of 1932 the legislature of New South Wales passed an amendment to the State industrial arbitration act, effective December 6, 1932, which empowered the industrial commission to alter the existing standard working hours, regulated the wage changes which might be permitted as a result of such alteration, and authorized the appointment of a conciliation commissioner and of an apprenticeship commissioner. The terms of the act are given in the New South Wales Industrial Gazette, December, 1932.

Hours

THE new legislation provides that the commission shall, "as soon as conveniently possible after the commencement of this act, and may from time to time thereafter, determine after a public inquiry and declare the standard hours for all industries to which the principal act applies." It is given power, however, to exclude from the operation of such a declaration industries in regard to which it feels that there are special circumstances which should be taken into consideration, and in dealing with these it is given full discretion.

The commission may in any industry or in respect of any employees or class of employees in any industry if in the public interest it shall deem it desirable so to do—

(1) Declare a greater number of ordinary working hours than the standard hours about to be declared; or

(2) Declare a greater number of ordinary working hours than the standard hours already declared; and in any event may increase the number of days on which the hours may be worked.

The commission may in respect of any employees or class of employees who are engaged upon work which in its opinion is prejudicial to health—

(1) Declare a lesser number of ordinary working hours than the standard hours about to be declared; or

(2) Declare a lesser number of ordinary working hours than the standard hours already declared.

The commission may also declare a lesser number of working hours for any industry or group of employees which, prior to January 4, 1926 (the date at which the 44-hour week legislation went into effect), had a lesser number of hours than the standard about to be declared.

Wages

IN THE main the amendment was intended to make sure that weekly earnings should not be changed in accordance with any alterations in hours made under its terms.

Wages and salaries fixed upon a weekly or longer basis by any award or industrial agreement in force at the date of any declaration made under subsection one of this section, or any award made or agreement entered into after such declaration, shall not be increased or reduced by reason of any increase or reduction of the ordinary working hours made in accordance with such declaration.

Where the ordinary working hours in any industry are increased or reduced by reason of any declaration made under subsection one of this section, the rate of wages specified in any award or industrial agreement as payable upon a daily or hourly basis shall, without any further award or variation or amendment of the award or agreement, be deemed to have been reduced or increased from the date of any such declaration to such rate as will provide each employee working full time with the same amount of wages as he would have received for working full time under the provisions of the award or agreement prior to the declaration.

In the same manner piecework rates are to be reduced or increased, if the hours are changed, in such manner "as will provide each employee working full time with the same remuneration as he would have received working full time at the same speed under the provisions of the award or agreement prior to the declaration."

Nevertheless, it is provided that when a declaration has once been made and the wage rates fixed in accordance with the above specifications, if the commission shall deem it well thereafter to reduce the hours it may also provide for a corresponding reduction of wage rates.

Adjustment of Basic Wage

THE act provides for the periodic revision of the basic wage, thus removing one of the standard complaints brought against the wage-fixing machinery. Under the legislation superseded by this amendment there had been no change in the living wage, as established by the industrial commission from December, 1929, to August, 1932. It was felt that in a period of rapidly changing economic conditions there would be a greater probability of securing corresponding alterations in the wage if the law called for a review at stated periods.

The commission shall within 28 days from the end of the months of March and September adjust the living wages so declared at such amount as will, in the opinion of the commission, accord with the increased or decreased cost of maintaining the determined standard, and shall within the said period of 28 days cause to be published in the Gazette the amounts of the living wage so adjusted.

Upon a declaration of the living wages or upon any adjustment thereof during the currency of any award or industrial agreement the terms of such award or industrial agreement affecting rates of pay shall be deemed to be varied to accord with such declaration as from the date of the declaration and with such adjustment as from the commencement of the first pay period in the month immediately following the month in which the adjustment is published in the Gazette.

WORKMEN'S COMPENSATION

Findings of Compensation Commission Conclusive if Supported by the Evidence

THE findings of fact in respect to a compensation claim and the determination of all questions by the United States Employees' Compensation Commission under the District of Columbia compensation act, are conclusive if supported by the evidence and may not be reviewed by the courts on appeal, according to a recent decision of the United States Supreme Court. (*Voehl v. Indemnity Insurance Co. of North America*, 53 S. Ct. 380.)

The facts in the case show that Karl F. Voehl was employed by the National Electric Supply Co. doing business in the District of Columbia. The company carried workmen's compensation insurance with the Indemnity Insurance Co. of North America. On Sunday, April 6, 1930, Voehl was injured, while driving his own automobile from his home to the company's warehouse, when the car overturned due to a defective steering gear. He was awarded compensation and the insurance carrier brought suit to enjoin the payment of this award. The Supreme Court of the District of Columbia dismissed the suit and the insurance carrier appealed the case to the District of Columbia Court of Appeals, contending that there was no causal connection between the employment and the injury. The evidence showed that at the time of the injury he was going to the warehouse to secure a load of ashes, which he planned to dump in a mud hole in the road near his residence. He claimed, however, that it was his intention to clean up some trash while he was there. The insurance carrier contended that this was not a part of his duties as he was employed as "head of the products division" and his duties in that capacity did not include cleaning out the warehouse. He was required to take care of the service calls outside of regular hours, and was often required to go to the warehouse on Sunday, receiving overtime pay for such work. However, it was contended that he was authorized to work only on service calls and not in cleaning out the warehouse, and therefore the injury received did not arise out of nor in the course of his employment.

The court of appeals reviewed the facts of the case and followed the decision in the case of *Interstate Commerce Commission v. Louisville & Nashville R. R. Co.* (227 U. S. 88), which held that a finding without evidence is beyond the power of the commission and an order based thereon is contrary to law and should be set aside. Reviewing the facts the court said:

The evidence clearly established, we think, that the purpose of the trip on the Sunday morning of the accident was to procure a load of ashes for Voehl's personal use, and that if in fact he intended to remove some trash, this was merely incidental to the general purpose for which the trip was made. Voehl at the time and place of the injury was not performing any duty in the course of his employment. The cause of the accident was a defect in his own automobile over which the employer had no control and in which he was driving at the time without any order from his employer. [60 Washington Law Reporter, 451.]

The suit enjoining the payment of the award was therefore allowed by the court of appeals and the decree of the lower court was reversed.

The employee appealed the case to the United States Supreme Court for a review of the decision. The Supreme Court reviewed the District of Columbia compensation act and concluded that the deputy compensation commissioner had acted within his authority in determining the particular questions as to whether the injury arose out of and in course of the employment, and held that his decision would be final if supported by the evidence.

The precise issue, therefore, in the case turned on "the general nature and scope of Voehl's duties, the particular instructions he had received, and the practice which obtained as to work in extra hours or on Sundays, and the purpose of the journey in which he was injured."

Mr. Chief Justice Hughes rendered the opinion of the court upholding the decision of the deputy compensation commissioner. He said in part as follows:

The deputy commissioner found that petitioner was injured while on his way to the employer's warehouse for the purpose of clearing it of débris in accordance with his duties, and that when so engaged on Sunday the terms of his employment covered the period of service from the time he left his home until his return, his compensation for this service being at an agreed rate per hour for the entire time, with an allowance for his transportation. We think that these findings were supported by the proof. From the testimony of the employer's manager, who had supervision of petitioner's work, it appeared that petitioner, being employed in the "refrigeration division" of the supply company, had charge of the maintenance and operation of the company's warehouse and of the maintenance of service on refrigerators in customers' homes. He was the "head of the products division." With other matters, it was his duty to see that the buildings and stock were kept in proper order, and that there was compliance with the fire rules. He had strict instructions with respect to the disposition of débris and its prompt removal.

It was pointed out that Voehl's hours of service were usually between the hours of 7.30 a. m. and 5.30 p. m., but that he was on duty all the time, subject to call, and that he always handled the calls of customers which were made outside of office hours. He was always paid for the overtime work, and the time spent in going to and returning from the work was always included in computing the amount paid for overtime. The court also commented on the fact that the manager had discussed the condition of the warehouse with Voehl and had called his attention to the necessity of keeping it better cleaned. In concluding the opinion the court said that the general rule was that "injuries sustained by employees when going to or returning from their regular place of work are not deemed to arise out of and in the course of their employment." (Cases cited.) However, the court said:

Ordinarily the hazards they encounter in such journeys are not incident to the employer's business. But this general rule is subject to exceptions which depend upon the nature and circumstances of the particular employment. "No exact formula can be laid down which will automatically solve every case." * * * Service in extra hours or on special errands has an element of distinction which the employer may recognize by agreeing that such service shall commence when the employee leaves his home on the duty assigned to him and shall continue until his return. And agreement to that effect may be either express or be shown by the course of business. In such case the hazards of the journey may properly be regarded as hazards of the service, and hence within the purview of the compensation act.

The decision of the District of Columbia Court of Appeals was, therefore, reversed and the court affirmed the decision of the lower court and the deputy compensation commissioner allowing compensation.

Occupational Disease Producing No Immediate Disability Not Compensable

A N EMPLOYEE contracting a skin disease while in the employment of a rug corporation, but suffering no disability until sometime after he left the company's employment, is not entitled to receive compensation under the Wisconsin workmen's compensation law. (Kimlark Rug Corporation et al. v. Stansfield et al. 246 N. W. 424).

The facts in the case show that Winfred Stansfield entered the employment of the Kimlark Rug Corporation in November, 1924, and continued in such employment, with the exception of a few short intervals when engaged in carpentering, until March, 1929.

In the course of and arising out of his employment with the rug corporation Stansfield contracted a skin disease, which became noticeable about January, 1928, but did not cause any disability to the employee. He continued to perform his duties and lost no time from work on account of his condition. He did, however, receive treatments from the company's doctor.

In 1929 Stansfield voluntarily discontinued his employment with the Kimlark Rug Corporation and entered the employment of the George Banta Publishing Co. where he worked until March, 1930. At that time, his condition having grown worse due to the skin disease contracted during his former employment, he resigned from the Banta Publishing Co., and at his physician's advice engaged in farming.

He filed a petition with the Wisconsin Industrial Commission for an award of compensation, and on September 9, 1931, the commission rendered an award in his favor in the sum of \$377.56. This award was affirmed by the Dane County Circuit Court and the Kimlark Rug Corporation appealed the case to the Supreme Court of Wisconsin, where the decision of the circuit court and the industrial commission was reversed. The court pointed to the fact that Stansfield suffered no wage loss or disability while in the employment of the rug corporation; and also commented on the fact that for a year after the employment relation had been discontinued he worked for another employer. The court said:

There is no question but that the dermatitis, from which respondent was suffering at the time of the hearing before the industrial commission, resulted from exposure while in the employ of appellant. But, because no loss of time or wages occurred while the relation of employer and employee existed between appellant and Stansfield, the workmen's compensation act does not provide for the exaction of compensation from his then employer.

The court cited many cases showing the limitation of the Wisconsin workmen's compensation statute with respect to occupational disease cases and stated that the general rule is "that the employee suffering from an occupational disease is entitled to be compensated if at the time of disability the relation of employer and employee existed."

The court concluded the opinion by saying:

It was pointed out in *Zurich Gen. Acc. & L. I. Co. v. Ind. Comm.*, 203 Wis. 135, 233 N. W. 772, that under the law no provision is made for such a case as is now before us where the workman has been subjected to exposure, but the disability does not occur while the relation of employer and employee exists between the workman and the concern in whose employ the exposure occurred. The statute as at present drawn does not aim at exposure, but at disability. An accident which produces no disability is not compensable. Stansfield, while undoubtedly uncomfortable as a result of the infection, was not incapacitated, and did not suffer any loss of earnings at any time while an employee of appellant. No disability occurring during that time, the judgment of the circuit court must be reversed, and the award of the commission vacated.

Recent Compensation Reports

Iowa

THE tenth biennial report of the Workmen's Compensation Service of Iowa, covering the period ending June 30, 1932, contains recommendations by the industrial commissioner, statistics of administrative activities, and decisions of the department in disputed cases.

A partial summary of departmental activities for each of the two fiscal years follows:

TABLE 1.—WORKMEN'S COMPENSATION EXPERIENCE IN IOWA, 1930-31 AND 1931-32

Item	July 1, 1930, to June 30, 1931	July 1, 1931, to June 30, 1932
Accidents reported	10,038	8,355
Fatal injuries	83	58
Settlements reported	4,704	4,076
Compensation paid in reported settlements	\$755,810	\$768,345
Medical and hospital services reported paid	\$145,199	\$111,148
Requests for arbitration	337	238
Expense of administration	\$18,551	\$18,643

The reduction in fatalities, 144 in the biennium covered as against 295 in the previous two years, is declared the brightest spot in administration. A decrease in accident reports is shown, but also an increase in compensation payments. Department expenditures show slight increase in traveling expense, due to more litigation.

Recommendations are submitted for amendments to the compensation law, as follows: Coverage for volunteer firemen, optional agricultural coverage, consideration for 7-day workers, protection for employees of subcontractors, and clarification of medical, surgical, and hospital provisions.

Attention is called to the favorable experience of several of the large plants operating in the State demonstrating the value of safety promotion and cooperation of the employee, the employer, and the insurance company. One plant operated the entire year of 1931 without a lost-time accident, and others have effected material reductions.

New York

SPECIAL Bulletin No. 176 of the New York State Department of Labor contains an analysis of the causes of accidents for which closing awards of compensation were made in the year ended June 30, 1930.

A change from fiscal to calendar year basis is contemplated for future bulletins. Detailed tables are presented with text analysis, showing the number of accidents, the extent of disabilities, the nature of the injuries, and the compensation costs, by causes and by industries.

Table 2 shows the number of cases closed during the fiscal year ending June 30, 1930, and the amount of compensation paid, by cause of accident, and also classified by industry.

TABLE 2.—NUMBER AND COST OF COMPENSATED ACCIDENTS IN NEW YORK, BY CAUSE AND BY INDUSTRY, FOR THE FISCAL YEAR ENDING JUNE 30, 1930

Cause of accidents	Total number of cases	Total weeks of disability ¹	Compensation ²	
			Total amount	Average cost per case
Handling objects and tools	39,103	483,930	\$7,433,458	\$190
Falls of workers	21,313	714,894	9,158,560	430
Mechanical apparatus (machinery, conveyors, etc.)	17,140	555,516	7,040,833	411
Vehicles	9,686	492,871	5,001,265	516
Falling objects	6,824	218,291	2,477,660	363
Dangerous and harmful substances	6,032	222,095	2,162,758	359
Stepping on and striking objects	5,187	42,608	640,409	123
Other or indefinite	4,563	102,682	1,328,760	291
Total, all causes	109,848	2,832,887	35,243,703	321

Classified by industry

Manufacturing	40,823	815,740	\$10,734,278	\$263
Construction	24,576	809,702	10,829,773	441
Transportation and public utilities	16,941	516,726	5,963,476	352
Service	14,124	416,560	4,320,663	306
Trade	11,172	188,557	2,515,343	225
Mining, quarrying, and other industries	2,212	85,602	880,170	398
Total, all industries	109,848	2,832,887	35,243,703	321

¹ The standard weighting of 1,000 weeks and estimated present value are included for each death and permanent total disability case.

² Medical costs are not included.

According to Special Bulletin No. 178 of the New York Department of Labor, which presents an analysis of the cost of compensation for 1930 and 1931, the department made closing awards of compensation during the calendar year 1930 amounting to over \$36,000,000 and \$33,000,000 for the calendar year 1931. The bulletin covers all industrial accident cases for which final awards of compensation were made during the two years, but differs from former publications on the same subject in covering calendar years instead of fiscal years.

The number of cases closed during the year 1930 was 107,312 and 98,424 for 1931. It is explained that many of these accidents occurred in earlier years, so the figures do not show how much the decrease in employment has reduced the number of compensable accidents nor state how the reduction in employment has affected the number of industrial accidents.

Table 3 shows the number of cases closed, the number of weeks' compensation awarded in permanent partial and temporary disability cases, and the amount of compensation awarded.

TABLE 3.—NUMBER OF COMPENSABLE CASES CLOSED IN NEW YORK AND COMPENSATION AWARDED DURING CALENDAR YEARS 1930 AND 1931, BY EXTENT OF DISABILITY

Extent of disability	Number of cases		Number of weeks compensation awarded		Amount of compensation	
	1930	1931	1930	1931	1930	1931
Death	1,328	1,177			\$8,375,995	\$7,232,761
Permanent total	50	68			775,137	970,804
Permanent partial	22,947	19,805	985,789	857,148	18,094,658	15,515,293
Temporary	82,987	77,374	532,588	561,945	9,332,491	9,983,667
Total	107,312	98,424	1,518,377	1,419,093	36,578,281	33,702,525

In Table 4 is presented a comparison for the current year and the previous year of the number of compensable cases closed, distributed according to the industry in which they occur. A decided reduction is shown for the manufacturing industry—18 per cent—while the service industry presents an increase of 11 per cent.

TABLE 4.—NUMBER OF COMPENSABLE CASES CLOSED IN NEW YORK DURING CALENDAR YEARS 1930 AND 1931, BY INDUSTRY

Industry	Number of cases year ending—		Per cent of change 1931 compared with 1930
	1930	1931	
Manufacturing	36,724	30,099	-18
Construction	24,796	23,002	-7
Transportation and public utilities	16,922	15,184	-10
Service	15,095	16,230	+8
Trade	11,571	11,804	+2
Other	2,204	2,105	-4
Total	107,312	98,424	-8

Pennsylvania

ACCORDING to compensation and accident statistics issued by the Bureau of Statistics of the Department of Labor and Industry of Pennsylvania, a total of 1,070 fatal and 84,036 nonfatal injuries was reported to the bureau of workmen's compensation during 1932, as against 1,482 fatal and 109,976 nonfatal injuries reported during 1931, or decreases of 27.8 per cent and 23.6 per cent, respectively.

This extraordinary decrease is attributed principally to the widespread unemployment resulting from the business depression, but it is pointed out that labor-saving machinery and accident prevention also proved important factors in reducing the number of workers killed or injured to the lowest figure recorded since 1916. Comparative decreases, from 1931 to 1932, in employment and injuries for important industrial groups for which comparative data are available, are given as follows:

Construction and contracting—employment 38.1 per cent, fatalities 55.2 per cent, nonfatal injuries 38.2 per cent; anthracite coal mining—employment 22.5 per cent, fatalities 36 per cent, nonfatal injuries 30.4 per cent; manufacturing—employment 16.5 per cent, fatalities 13.3

per cent, nonfatal injuries 26.0 per cent; quarrying—employment 13.4 per cent, nonfatal injuries 31.9 per cent; bituminous coal mining—employment 11.7 per cent, fatalities 22.2 per cent, nonfatal injuries 28.4 per cent; wholesale trade—employment 8.6 per cent, fatalities 41.2 per cent, nonfatal injuries 19.0 per cent; retail trade—employment 7.0 per cent, fatalities 32.0 per cent, nonfatal injuries 8.6 per cent.

Table 5 shows the number of fatal and nonfatal injuries reported during 1932, distributed according to industrial group classification, with per cent of change from 1931.¹ An increase of 30.3 per cent for the State and municipal group is due mainly to the extensive road building program instituted during 1932.

TABLE 5.—NUMBER OF FATAL AND NONFATAL INJURIES REPORTED IN PENNSYLVANIA, 1932 AS COMPARED WITH 1931, BY INDUSTRIAL GROUP

Industrial group	Number of accidents reported		Per cent of change, 1932 compared with 1931	
	Fatal	Nonfatal	Fatal	Nonfatal
Construction and contracting	73	8,099	-55.2	-38.2
Manufacturing	202	23,245	-13.3	-26.0
Coal mining:				
Anthracite	280	15,569	-36.0	-30.4
Bituminous	186	10,896	-22.2	-28.4
Quarrying and mining other than coal mining	26	868	0.0	-31.9
Transportation and public utilities	101	3,518	-29.9	-25.7
Trade:				
Retail	32	6,550	-32.0	-8.6
Wholesale	10	989	-41.2	-19.0
State and municipal employment	84	7,177	-19.2	+30.3
Other industries	76	7,125	+5.5	-10.7
Total	1,070	84,036	-27.8	-23.6

A reduction is also shown in both compensation liability and the number of agreements approved. The total amount of compensation awarded for the year was \$11,112,178, as compared with \$14,176,121 for 1931, a decrease of 21.6 per cent. Compensation awards were made in 1,095 fatal cases, amounting to \$3,606,745, an average of \$3,294 per case; in 2,429 permanent disability cases, amounting to \$3,036,548, an average of \$1,250 per case; and in 51,933 temporary disability cases, amounting to \$4,468,885, an average of \$86 per case. The length of disability for all temporary disability cases compensated during 1932 averaged 44.5 days, as compared with an average of 41.5 days for 1931, an increase of 7.2 per cent over the previous year.

United States and District of Columbia

THE sixteenth annual report of the United States Employees' Compensation Commission, for the fiscal year ending June 30, 1932, covers the operations of the three workmen's compensation laws administered by the commission: United States employees' compensation act, which became effective September 7, 1916; longshoremen and harbor workers' compensation act, which became effective July 1, 1927; and District of Columbia workmen's compensation act, which became effective July 1, 1928.

The commission explains that it was necessary to omit in this report practically all of the customary tables showing in detail the operations under each of the three laws, and to otherwise shorten the report, in order to keep within the limited appropriation for the current fiscal year.

¹ For data covering 1931, see *Monthly Labor Review* for April, 1932.

United States Employees

UNDER the United States employees' compensation act, reports were received by the commission during the calendar year 1931 of 28,438 injuries, an increase of 2,369 over the number reported during 1930, the highest previous record. More than one-half of this increase is accounted for by 1,298 injuries in 1931 in the Forest Service of the Department of Agriculture over the number for the previous year, or 2,954 injuries in 1931 as against 1,656 in 1930. The additional injuries are attributed to a considerable increase in employment in connection with the suppression of forest fires, an extremely hazardous class of work which is usually of an emergency character and consequently largely performed by casual and untrained labor.

The number of claims for death benefits during 1931 was 168, the lowest in the history of the commission, as compared with 206 death claims in 1930 and 263 in 1929. The total number of claims received in 1931, however, was 9,408, the highest record since 1920, as against 9,283 in 1930, and 9,337 in 1931. There was consequently an increase from 1930 to 1931 in the total number of claims received of only 1.35 per cent, while the total number of injuries reported shows an increase of 9.09 per cent.

The number of cases closed during 1931 consisted of 292 fatal cases, of which 153 were approved while 57 were disapproved, and 27,052 disability cases, a total of 27,344. The disability cases consisted of 225 cases involving permanent partial disability, 15,567 cases of temporary total disability causing loss of time, 9,571 cases in which the injury did not cause a loss in working time, and 1,689 cases disapproved by the commission.

The usual summary table, which is not included in the report, but which was furnished by the commission, is shown as Table 6. This presents a summary of awards and valuations, nonfatal cases closed, and fatal cases acted upon during the calendar year 1931.²

TABLE 6.—AWARDS AND VALUATIONS UNDER FEDERAL EMPLOYEES' COMPENSATION ACT, BY EXTENT OF DISABILITY, 1931

Extent of disability	Number of cases	Duration (days)	Average duration (days)	Amount of award	Average award
Temporary total disability:					
Compensated	7,255	295,514	40.7	\$734,438	\$101.25
Noncompensated	8,312	75,066	9.0		
Total	15,567	370,580	23.8	734,438	47.18
Permanent partial disabilities:					
Dismemberments	^a 136	15,315	112.6	37,076	272.62
Loss of function	^b 89	48,424	544.1	140,319	1,576.61
Total	225	63,739	283.3	177,395	788.42
Deaths	210			^c 2,021,683	9,627.06
Burials (181)				36,087	199.38
Award before death (27)				21,083	780.85
Medical cost (fiscal year 1931) ^d				435,903	
Grand total	16,002	434,319	27.5	3,426,589	57.74

^a Includes 19 noncompensated cases with a duration of 628 days.

^b Includes 21 noncompensated cases with a duration of 2,158 days.

^c Estimated total cost.

^d Includes medical care in permanent disability cases on compensation rolls.

^e For 15,792 nonfatal cases.

²For similar data covering 1930, see Monthly Labor Review, March, 1932.

On December 31, 1931, there were 611 cases on the docket in which compensation was being paid for permanent total disability, and 1,194 cases of permanent partial disability in which compensation was being paid for reduction in earning capacity. Approximately 36 per cent of the total disability cases and 30 per cent of the permanent partial disability cases are being compensated for injuries of more than 10 years' duration. The United States employees' compensation act differs from other compensation laws in providing payment of compensation in permanent total disability cases during the entire term of disability and in permanent partial disability cases as long as the disability causes a loss in earning power.³ Total payments made up to December 31, 1931, in these cases amounted to \$3,678,307 for compensation and \$563,966 for medical care in the total cases, and \$3,395,574 for compensation and \$549,480 for medical care in the partial cases. The future cost is estimated to be approximately \$8,500,000 for the total cases, and nearly \$4,000,000, exclusive of medical expense, for the partial cases.

Attention is called to the lack of organized safety work for the prevention of accidents, as the records indicate that at least some of the 210 deaths considered during the year might have been prevented. It is pointed out that prevention or reduction of accidents is desirable, even as an economic proposition, because the total probable cost of compensation benefits on account of the 210 deaths is \$2,096,814. So far as known, the Navy Department is the only executive department with an organized safety division.

Injuries from automobiles, vehicles, and other transportation facilities, such as cars and engines, airplanes, trucks, and motor cycles, accounted for 73, or more than one-third, of the fatal cases. More than one-fifth of the deaths (45) were due to suffocation by drowning, of which 24 occurred following a fall from a watercraft and 14 following a fall from a gangplank or bridge. Conflagration and other accidental burns caused 21 deaths.

Longshoremen and Harbor Workers

UNDER the longshoremen and harbor workers' act, reports were received during the fiscal year ending June 30, 1932, of 131 fatal and 25,206 nonfatal injuries, a total of 25,337 cases, or approximately 12 per cent less than the number reported for the previous fiscal year (28,863), and the smallest number reported for any one of the five years of operation. Besides the new cases, a total of 909 former cases were reopened for consideration during the year.

The number of cases closed during the year consisted of 94 fatal and 26,713 nonfatal injuries. In 26 of the fatal cases there were no dependents, and 53 other cases did not come under the scope of the law. The nonfatal cases consisted of 9,731 cases in which compensation payments were completed, 12,751 cases involving no loss of time, 3,128 cases in which the duration of disability did not exceed 7 days, and 1,103 cases disapproved by the commission.

Longshoremen suffered 60 of the fatalities, with an estimated compensation liability of \$279,332, and repair men 34 of the fatalities,

³ Fourteen other acts in the United States also provide for compensation during the entire period of permanent total disability, while 36 limit payments, and 1 of the 14 acts provides for compensation during life in permanent partial disability cases of 60 per cent or more.

with an estimated compensation liability of \$145,561. Out of 12,073 closed nonfatal cases involving loss of time, 9,698 cases with compensation payments of \$1,773,677 were incurred by longshoremen, and 2,375 cases with compensation payments of \$546,073 were incurred by repair men.

The principal causes of nonfatal injuries to longshoremen were the same as in the previous year, with a slight variation in the percentage of injuries: Handling of material by hand, 31.3 per cent; falling objects, 23 per cent; moving objects, 17.8 per cent; and falls of persons, 13.4 per cent. Fifty per cent of the fatalities were caused by falls. The most frequent and serious cause of injuries to repair men was, as formerly, falls of persons, which accounted for 22.3 per cent. Handling material by hand caused 18.8 per cent, flying objects 12.1 per cent, and falling objects 9.5 per cent.

The material reduction in new injuries is attributed principally to the slump in industrial operations, but it is also pointed out that some allowance should be made for the results of accident prevention programs in the different ports. Substantial progress is reported in the developing of a voluntary safety code for stevedoring operations. A number of amendments suggested for the first draft of this code have been included in the second draft, issued by the American Steamship Owners' Association.

District of Columbia Private Employment

UNDER the District of Columbia workmen's compensation act, reports were received during the fiscal year ending June 30, 1932, of 56 fatal and 20,916 nonfatal injuries, a decrease of 21 per cent in fatal and an increase of 7 per cent in nonfatal injuries as compared with the previous year.

The number of cases closed during the year consisted of 32 fatal and 21,761 nonfatal injuries. In 7 of the fatal cases there were no dependents, and 18 others did not come under the scope of the law. The nonfatal cases included 3,808 cases in which compensation was paid without an award, 12,718 cases involving no loss of time, and 4,103 cases in which the duration of disability did not exceed 7 days.

Fatal injury cases approved and nonfatal cases involving loss of time approved during 1931-32 totaled 7,812 and consisted of 37 fatal cases, 166 permanent disability cases, 3,623 temporary disability cases of more than 7 days' duration, and 3,986 temporary disability cases of 7 days or less.

The distribution of the nonfatal cases was: Clerical, personal service, and financial establishments, 1,342; construction, 2,517; manufacturing, 845; trade, 2,259; and transportation, 812. The estimated total cost of the fatal cases was \$209,804, and the compensation paid for loss of time in the nonfatal cases was \$166,081 in permanent disability cases and \$227,529 in temporary disability cases. In addition \$5,951 was paid for serious facial or head disfigurement in 14 cases.

The principal cause of the 7,812 injuries was handling of objects, which accounted for 2,012 of the nonfatal injuries but no fatalities. Falls of persons was next in numerical importance, with 561 from stairs, ladders, scaffolds, and staging; 308 on the level or from stumbling over objects; and 152 while carrying a load; total 1,357 injuries, including 12 fatalities. Falling objects accounted for 5 fatal and 585 nonfatal injuries. Striking against objects caused 633 injuries, stepping on objects caused 611, and being struck by objects caused 311. Hand tools caused 496 injuries, and vehicles 429 injuries, of which the automobile was responsible for 9 fatal and 353 nonfatal injuries. Mechanical causes accounted for 378 injuries, all nonfatal.

WORKERS' EDUCATION AND TRAINING

Occupations of Students of Cleveland College for Adults

IN 1925 in Cleveland, Ohio, a separate degree-granting institution for adults was established and designated "Cleveland College in Affiliation with Western Reserve University and Case School of Applied Science." The following year this college was taken into full membership by the university but was allowed to continue its affiliation with the Case School. Writing of this educational undertaking in the January, 1933, issue of the *American Federationist*, Gary Myers of Western Reserve University reports that the college enrollment for the scholastic year 1929-30 was 7,182, nearly all of whom were wage earners, the great majority of them working during the day and studying at night.

Almost all occupations, social ranks, and degrees of wealth are represented among the students. Day laborers, cab drivers, clerks, and stenographers sit side by side with artists, poets, journalists, social workers, judges, politicians, business executives, Junior Leaguers, wives and children of millionaires—the one tie being a desire for some sort of knowledge and training and the ability to take the college courses. There are practically as many women as there are men availing themselves of the courses.

The 7,182 students included 2,334 clerks, salesmen, secretaries, and stenographers; 1,707 with miscellaneous occupations, among them bricklayers, bus and truck drivers, butchers, carpenters, chauffeurs, day laborers, dishwashers, doormen, dressmakers, elevator operators, icemen, laundresses, maids, messengers, milkmen, pages, painters, porters, seamstresses, switchmen, telephone operators, waiters and waitresses.

There were 1,300 professional men and women: Artists, architects, chemists, college professors, deans, dentists, doctors, lawyers, engineers, journalists, laboratory technicians, librarians, metallurgists, statisticians, ministers, school teachers, supervisors, principals; 289 presidents, vice-presidents, managers, and other senior business executives; 845 tellers, cashiers, auditors, treasurers, buyers, general agents, and other junior executives.

The ages of the students ranged from 16 to 76, the largest age group (including 3,710) being between 20 and 30. There were 1,460 between 30 and 40; 670 past 40; 180 past 50; and 21 over 60.

The students study what they please, attend class or not, and take examinations or not just as they wish. Notwithstanding this freedom, it is reported that 85 per cent continue their courses to the close and all but 4 per cent of those taking the final examinations succeed in passing them. The average grade is definitely higher than that of the first-class day colleges. There have been no cases of disorder and there are no rules and no discipline committee.

As the great majority of the students of Cleveland College are wage earners, the industrial depression was most acutely felt during the scholastic year 1931-32, when the enrollment was approximately 5,000. When business is rehabilitated the student body will undoubtedly expand rapidly, Professor Myers predicts, for the mass of people within reach of this institution appreciate the opportunities it offers for vocational advancement and the enrichment of leisure. Although the college enrollment-credit courses shrank very considerably last year, the actual number of people the college served was over 100 per cent greater than that of the preceding year owing to the extension service, which included 14,154 adults registered in (from 6 to 10 weeks) noncredit courses.

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INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in February, 1933

DATA regarding industrial disputes in the United States for February, 1933, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in each year from 1927 to 1932, the number of workers involved and man-days lost for these years and for each of the months, January, 1931, to February, 1933, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The number of man-days lost as given in the last column of the table, refers to the estimated number of working days lost by workers involved in disputes which were in progress during the month or year specified.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1931, TO FEBRUARY, 1933, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1932

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost in disputes existing in month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927: Total.....	734	.....	349,434	.....	37,799,394
1928: Total.....	629	.....	357,145	.....	31,556,947
1929: Total.....	903	.....	230,463	.....	9,975,213
1930: Total.....	653	.....	158,114	.....	2,730,368
1931: Total.....	894	.....	279,299	.....	6,386,183
1932: Total ¹	704	.....	232,092	.....	6,098,769
1931					
January.....	57	19	10,150	2,905	181,169
February.....	52	29	20,473	10,677	223,660
March.....	49	26	26,453	28,012	476,904
April.....	73	39	27,135	22,687	770,512
May.....	115	45	28,000	15,603	400,509
June.....	90	47	18,795	15,223	511,926
July.....	73	51	49,434	56,683	612,864
August.....	79	36	11,019	14,759	1,157,013
September.....	117	65	36,002	37,427	483,649
October.....	77	45	34,384	29,380	1,052,095
November.....	62	39	13,219	13,690	355,818
December.....	50	21	4,145	1,318	150,064
1932					
January.....	79	37	11,105	4,648	117,298
February.....	50	30	31,140	28,691	417,966
March.....	51	28	31,906	11,600	685,949
April.....	73	34	17,707	20,066	572,121
May.....	79	43	43,403	49,232	1,230,202
June.....	64	38	16,010	23,540	927,996
July.....	58	37	19,657	32,597	700,985
August.....	72	35	27,749	27,199	728,201
September.....	71	31	16,676	6,834	536,262
October.....	38	17	8,962	1,633	118,869
November.....	36	13	4,332	1,446	38,716
December.....	33	10	3,385	877	34,204
1933					
January ¹	65	33	19,916	9,248	252,223
February ¹	45	37	14,623	11,011	197,283

¹ Preliminary figures subject to change.

Occurrence of Disputes

TABLE 2 gives by industrial groups the number of strikes beginning in December, 1932, January and February, 1933, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN DECEMBER, 1932, JANUARY AND FEBRUARY, 1933

Industrial group	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	Decem- ber	January	February	Decem- ber	January	February
Auto, carriage, and wagon workers		3	1		6,307	3,000
Bakers	1	1		7	30	
Brewery, soft-drink workers			1			8
Building trades	11	8	6	288	626	439
Chauffeurs and teamsters	2	1	1	158	50	23
Clothing	2	22	13	234	5,187	8,089
Food workers	1			100		
Furniture	1	1		300	15	
Hotel and restaurant workers		1			80	
Iron and steel		1			60	
Laundry workers	1		1	80		11
Metal trades				2		25
Miners	9	14	2	1,990	6,895	750
Motion-picture operators, actors, and theatrical workers		1			6	
Municipal workers		2	2		78	90
Telegraph and telephone workers		1			8	
Textiles	4	7	14	219	533	2,063
Other occupations	1	2	2	9	41	125
Total	33	65	45	3,385	19,916	14,623

Size and Duration of Disputes

TABLE 3 gives the number of industrial disputes beginning in February, 1933, classified by number of workers and by industrial groups.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN FEBRUARY, 1933, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIAL GROUPS

Industrial group	Number of disputes beginning in February, 1933, involving—			
	6 and under 20 workers	20 and un- der 100 workers	100 and un- der 500 workers	1,000 and under 5,000 workers
Auto, carriage, and wagon workers				1
Brewery, soft drink workers	1			
Building trades	2	3	1	
Chauffeurs and teamsters		1		
Clothing		6	5	2
Laundry workers	1			
Metal trades	2			
Miners			2	
Municipal workers		2		
Textiles	2	4	8	
Other occupations		1	1	
Total	8	17	17	3

In Table 4 is shown the number of industrial disputes ending in February, 1933, by industrial groups and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN FEBRUARY, 1933, BY INDUSTRIAL GROUPS AND CLASSIFIED DURATION

Industrial group	Classified duration of strikes ending in February, 1933			
	$\frac{1}{2}$ month or less	Over $\frac{1}{2}$ and less than 1 month	1 month and less than 2 months	2 and less than 3 months
Auto, carriage, and wagon workers	2	1		
Brewery, soft drink workers	1			
Building trades	5	2		
Chausseurs and teamsters				1
Clothing	9	1	1	
Laundry workers	1			
Metal trades	2			
Miners	1	2	2	
Textiles	8		1	
Other occupations	1			
Total	30	6	4	1

Conciliation Work of the Department of Labor in February, 1933

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 157 labor disputes during February, 1933. These disputes affected a known total of 23,312 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

There were 17 cases involving the law on the prevailing rate of wages. In these cases it is not always possible to show the number involved, due to lack of information as to total number required before completion of construction.

On March 1, 1933, there were 24 strikes before the department for settlement, and in addition 65 controversies which had not reached the strike stage. The total number of disputes pending was 89.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF FEBRUARY, 1933

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved
					Beginning	Ending	
<i>Disputes involving Government construction</i>							
Post offices:							
Billings, Mont.	Controversy	Building laborers	Prevailing-wage investigation	Pending.	1933	1933	
Beaumont, Tex.	do	Building crafts	do	Adjusted. Rates agreed on by parties in interest.	Feb. 27	Mar. 3	(¹) 24
Sarasota, Fla.	do	do	do	do	do	do	75
Uniontown, Pa.	do	do	do	Pending.	Feb. 1	do	25
Chehalis, Wash.	do	Building laborers	Rebating and other violations of wage law.	Adjusted. Posted scale accepted by laborers. Hod carriers and plasterers to receive union rate. Adjusted. Workers paid back pay.	Feb. 10	Feb. 20	10 30
High Point, N. C.	do	Building crafts	Rate of \$3 per day posted. Asked \$4.50.	Adjusted. Workers paid back pay.	Feb. 24	Feb. 24	8
Washington, D. C.	do	Pile drivers and caissons workers.	Back pay.	Adjusted. Pile drivers and caissons workers to receive same rate of pay to completion of this job.	Jan. 1	Feb. 20	10 150
Pittsburgh, Pa.	do	Sheet-metal workers	Rates of wages.	Pending.	Feb. 19	do	8
Detroit, Mich.	do	Glaziers	Asked local men be employed.	Adjusted. Agreed on \$1 per hour.	Jan. 15	Feb. 17	15
Princeton, N. J.	do	Iron workers	do	Adjusted. Rates agreed on by parties in interest.	Feb. 2	Feb. 28	10 100
Jacksonville, Fla.	do	Building crafts	do	Pending.	Feb. 7	Feb. 24	225
Daytona, Fla.	do	do	do	do	do	Feb. 23	100
South Bend, Ind.	do	do	do	do	Jan. 7	Feb. 1	5
Do.	do	do	do	do	do	do	6
Lansing, Mich.	do	Building crafts	Jurisdiction of ventilator work on building.	Pending.	Jan. 15	do	300
Brockton, Mass.	do	do	do	do	do	do	12 38
Gloucester, Mass.	Strike.	Carpenters, plumbers, and electricians.	Subcontractor failed to pay electricians.	do	Feb. 1	do	4 39
Veterans' hospital, Togus, Me.	Controversy	Building crafts	Adjusted. Local men largely employed.	do	Jan. 26	Feb. 1	20
State college, San Diego, Calif.	do	do	Adjusted. Satisfactory scale adopted.	do	Feb. 1	Feb. 4	20
Veterans' home, Leavenworth, Kans.	Strike.	Carpenters.	Adjusted. Settled and men returned to work.	do	Jan. 28	Feb. 5	8 200

¹ Not reported.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF FEBRUARY, 1933—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved
					Beginning	Ending	
<i>Disputes involving Government construction—Continued</i>							
Federal building, Seattle, Wash.	Controversy	Sign painters	Investigation as to prevailing rate for lettering doors.	Adjusted. Settled at union rate.	1933	1933	
Immigration inspection station, San Ysidro, Calif.	do.	Building crafts	Pending	do	Jan. 27	Feb. 15	2
Huey P. Long Bridge, New Orleans, La.	do.	Bridge workers	Pending	do	Feb. 4	do	(1)
Arsenal buildings, Metuchen, N. J.	do.	Building crafts	Pending	do	Feb. 14	Feb. 21	90
Federal prison, Milan, Mich.	do.	Electricians	Unclassified. Department has no jurisdiction as prevailing-rate law did not apply.	do	do	do	
Veterans' hospital, Batavia, N. Y.	do.	Bricklayers, iron workers, and laborers	Agreed on prevailing rates.	do	Feb. 8	Feb. 16	30
Reformatory building, El Reno, Okla.	do.	Bricklayers	Asked local men be employed. Prevailing-wage investigation.	do	Feb. 17	Feb. 17	4
Immigration station, Detroit, Mich.	do.	Building crafts	Violation of law by letting of labor-only contracts.	do	do	do	60
Veterans' hospital, Des Moines, Iowa.	do.	Painters	Prevailing-wage investigation.	do	do	do	14
Buildings, Fort Knox, Ky.	do.	Building crafts	Proposed wage cut.	do	do	do	16
Reformatory buildings, Chillicothe, Ohio.	do.	Bricklayers	Prevailing-wage investigation.	do	do	do	10
<i>Disputes involving general industry</i>							
Lace workers, Wilkes-Barre, Pa.	Strike	Lace workers	Proposed 10 per cent wage cut.	Adjusted. Accepted 7½ per cent cut.	Feb. 1	Feb. 14	150
Star Slipper Co., New York City	do.	Slipper workers	Piecework rates cut.	Adjusted. Settlement through compromise.	Jan. 23	Jan. 30	20
Frye Shoe Co., Marlboro, Mass.	Controversy	Shoe workers	Piecework rates cut.	Pending	do	do	4
Building, Harrisburg, Pa.	do.	Building crafts	Wages cut 25 per cent.	do	Jan. 20	do	200
W. A. Goldsmith Co., Conneaut, Ohio.	do.	Ladies' underwear	Working conditions.	do	Feb. 3	do	(1)
Superb Bronze Works, Brooklyn, N. Y.	do.	Bronze workers	Piecework rates cut through introduction of new machinery.	do	Jan. 15	Jan. 30	200
Block of store buildings, Philadelphia, Pa.	Strike	Plasterers	Working conditions.	do	Feb. 7	do	(1)
			do	do	do	do	(1)

Employer	Location	Industry	Period	Result
Laundry drivers, Joliet, Ill.	do	Laundry drivers	do	Adjusted. Part restored to regular positions.
American Shoe Co., Brooklyn, N. Y.	do	Shoe workers	Asked union recognition.	Feb. 21 (1) 6,200
Cromwell Silver Manufacturing Co., New York City.	do	Metal spinners	Working conditions.	Feb. 6 Feb. 7 Feb. 13 9 65
Boy's Wash & Novelty Suit Co., New York City.	do	Cutters, operators, pressers, finishers, and cleaners.	Wages and working conditions.	Adjusted. Objectionable workmen to be dismissed. Increases allowed. Returned to work.
Astor Cleaning & Dyeing Co., Mount Vernon, N. Y.	do	Drivers and inside workers.	Wage cut and reduction of force.	Adjusted. Compromised and all returned. Settled through compromise.
Victory Cleaners and Dyers, Mount Vernon, N. Y.	do	Cleaners and dyers.	do	Adjusted. No wage cuts. All returned.
World Cleaners and Dyers, Mount Vernon, N. Y.	do	Drivers and workers.	do	Adjusted. Allowed \$1.25 per hour; conditions satisfactory.
Kellogg Building, Battle Creek, Mich.	Lockout	Bricklayers	Alleged violation of contract	Adjusted. Allowed \$3 per week increase and shorter hours.
Goodman & George (Inc.), New York City.	Threatened strike.	Fur workers and dyers.	Wages, hours and conditions.	Adjusted. Tentative agreement for one month.
Wabash Telephone Co., Bloomington, Ill.	Controversy	Telephone operators.	Wage cut 20 per cent additional.	Adjusted. Union rate and conditions allowed.
Kellogg Building, Battle Creek, Mich.	do	Iron workers.	Asked union rate and conditions.	Adjusted. Accepted arbitration award; reinstatement refused.
Luddecke Express Co., Newark, N. J.	Strike	Teamsters.	Refusal to accept arbitration award and asked reinstatement of two discharged.	Pending.
Dam Building, Aspinwall, Pa.	Controversy	Workers on dam	Low wages.	Adjusted. Union scale allowed receiving \$1.
National Dairy Building, Detroit, Mich.	Lockout	Bricklayers	Asked union scale \$1.25 per hour; additional wage cuts.	Union scale allowed and union conditions.
Shoe workers, Lynn, Mass.	Strike	Shoe workers	do	Pending.
Shoe workers, Boston, Mass.	do	Lasers, and others.	Low rates for piecework.	do
Perfect Negligee Co., New York City.	do	Cutters and operators.	Working conditions.	Adjusted. Compromised and will re-employ as needed.
Jos. Hollander (Inc.), Newark, N. J.	Controversy	Workers	do	Pending.
Martin-Weinstein, Brooklyn, N. Y.	Strike	Lasers and heelers.	Discharge of foreman.	Adjusted. Satisfactory settlement.
	Total			do
				Feb. 27 (1) 11,543
				Mar. 2 35 66
				11,769

¹ Not reported.

Strikes and Lockouts in Canada, 1932

IN 1932 there were 116 strikes and lockouts in Canada—28 more than in the preceding year. The number of workers involved in these industrial disputes of 1932 was 23,390, an increase of 12,652 over 1931. The time loss in man working days was 255,000 in 1932 as compared with 204,238 in the previous 12-month period. Such increases are accounted for mainly by the greater number and importance of the coal-mine disputes, which in some cases were continued for relatively long periods. For the 6 years preceding 1932, however, the time loss in coal-mining controversies was comparatively slight. Most of the time loss in such disputes in 1932 was due to two controversies in Nova Scotia and four in Alberta. In other industries the 1932 time loss was considerably less than that of 1931, although the number of employees involved was almost double in the later year. As in 1931 the majority of the disputes did not continue long and involved relatively few workers. The chief industries affected were logging, sawmilling, salmon fishing, and fur and clothing manufacture.

Thirty-one of the disputes were against a reduction in wages, 24 for wage increases, including 5 for a combination of causes, 13 for securing or maintaining union wages and working conditions, and 7 to secure union recognition, 15 resulted from other causes affecting wages and working conditions, 10 were due to the discharge of workers, and 5 were sympathetic strikes.¹

The following is a record of the strikes and lockouts in the Dominion from 1913 to 1932:

STRIKES AND LOCKOUTS IN CANADA, 1913 TO 1932

Year	Number of disputes		Disputes in existence in the year		
	In existence in the year	Beginning in the year	Employers involved	Workers involved	Time loss in working-days
1913	152	143	1,077	40,519	1,036,354
1914	63	58	261	9,717	490,850
1915	63	62	120	11,395	95,042
1916	120	118	332	26,538	236,814
1917	160	158	758	50,255	1,123,515
1918	230	228	782	79,743	647,942
1919	336	332	1,967	148,915	3,400,942
1920	322	310	1,374	60,327	799,524
1921	168	159	1,208	28,257	1,048,914
1922	104	89	732	43,775	1,528,661
1923	86	77	450	34,261	671,750
1924	70	64	435	34,310	1,295,054
1925	87	86	497	28,949	1,193,281
1926	77	75	512	23,834	266,601
1927	74	72	480	22,209	152,570
1928	98	96	548	17,581	224,212
1929	90	88	263	12,946	152,080
1930	67	67	338	13,768	91,797
1931	88	86	266	10,738	204,238
1932	116	111	497	23,390	255,000

¹ Labor Gazette, Ottawa, February, 1933, pp. 132, 133, and 142.

LABOR AWARDS AND DECISIONS

Board of Reference Reports on Wage Dispute in Anthracite Industry

THE board of reference appointed November 3, 1932, in the wage controversy between the United Mine Workers of America and the anthracite operators was unable to agree on the question submitted to them as to the necessity for a 35 per cent cut in the wages of the mine workers.

The wage agreement between the anthracite operators and the United Mine Workers of America, entered into August 8, 1930, extends the provisions of the agreement of February 17, 1926, for the period beginning September 1, 1930, and ending April 1, 1936. Under the terms of this agreement it is provided that not oftener than once in any year either party may, in writing, propose modifications in the wage scales of said contract. The agreement provides also that where the parties fail to reach an adjustment in any issue in controversy, the matter shall be referred to a board of two men.

The board shall be obligated, within 90 days after appointment, to arrive at a decision on all issues in controversy, and to that end shall formulate their own rules and methods of procedure and may enlarge the board to an odd number, in which event a majority vote shall be binding.

In August, 1932, the operators proposed to modify the wage scales by a reduction of 35 per cent. Conferences were held from September 6 to October 4, but no agreement was reached by the committees representing the miners and the operators. On November 3, 1932, Frank Morrison and George Rublee were appointed as members of the reference board.

The representatives of the operators and the United Mine Workers submitted briefs. The time of the board to report was extended from the limit of 90 days to not later than March 1, 1933.

When it was found that the members of the board as constituted could not agree, Mr. Rublee requested Mr. Morrison to join him in enlarging the board to an odd number, as provided for in the agreement. Mr. Morrison refused, stating that in his opinion the words "may enlarge the board to an odd number" merely conferred an optional power. Since the members of the board were unable to arrive at a decision, they made individual reports on March 1, 1933.

The report of Mr. Morrison is, in part, as follows:

The operators contend that the wage scale of the miners is responsible for the high selling cost of anthracite, for which reason the market has been diverted to other fuels, because "the consumer is unwilling or unable to pay the present prices for anthracite." They assert and submit figures as their evidence that the loss of market antedates this depression; that the year 1923 marked the advent of the present wage scale and with it the highest prices the industry had ever known.

While the consolidated companies lost \$10,507,779 in 1932, the pay roll of the miners in 1932 was \$40,186,428 less than in 1931. The Department of Labor figures show that the anthracite pay roll of 1932 was 46.3 less than it was in 1929, and employment in 1932 was 37.7 less than it was in 1929.

In my opinion the figures for 1931 and 1932 are typical of what practically every other industry is experiencing in varying degrees in this depression. There is no one industry that is not feeling the shock of this economic cataclysm. To claim that the depression is not largely responsible for the slackening of returns to the anthracite industry is to ignore present conditions of industry and commerce not only in our own country but throughout the world.

As representative of the large profits made by the anthracite coal producing companies during the past 20 years the brief of the mine workers as of December 5, 1932, points out that the original stock of Delaware, Lackawanna & Western Coal Co. during the 22 years, 1910 to 1931, received dividends averaging over 31½ per cent per year on its original par value, and, within the same period, its book value increased over threefold. Also during the period 1922-1931, inclusive, the average return on the original investment in stock of the Glen Alden Coal Co. was 144 per cent per year, and the average dividend returns on the stock of the Lehigh & Wilkes-Barre Coal Co., on the par value of its stock prior to a 100 per cent stock dividend in 1924, was 44½ per cent during the period 1909-1929.

In the light of these representative conditions for the years prior to the depression, the conclusion reached by the mine workers is logical. It is as follows:

"If enormous dividends are paid during prosperity and dividends or net profits maintained in depression; if, under prosperous conditions, resources are dissipated by huge distributions in the form of extra dividends; if stock dividends of 100 per cent and over are paid; then the stockholder in anthracite producing corporations must naturally expect reductions and omissions during such periods of depression as we are now experiencing."

The ability of the companies to withstand the existing small and temporary losses in income is conclusively demonstrated by the consolidated balance sheet of October 31, 1932. This shows cash and other current assets to the amount of \$80,322,174, and a combined surplus of \$119,075,213.

Economic recovery, as a matter of fact, depends upon the restoration of purchasing power to the twelve to fifteen millions of American workers of all classes who are now without employment. When this is done, the demand for anthracite will be revived, old markets will be restored, and new markets acquired.

It is clear, from the testimony submitted to the board, that freight rates and distributive costs absorb a large proportion of the price paid by wholesale and retail consumers of anthracite.

What is of fundamental importance to the future prosperity of the industry is the meeting of the operators and United Mine Workers in a spirit of complete cooperation for its permanent development. To this end I recommend that the procedure proposed by the United Mine Workers of America in their statement to the board of December 5, 1932, be adopted, as follows:

1. The joining of the board, the operators, and the mine workers in a request to the Interstate Commerce Commission that it institute an emergency inquiry as to the reasonableness of the anthracite freight rates.

2. To utilize paragraph 5 of the present agreement dated August 8, 1930, which provides for a joint permanent committee of 12 men, equally divided between the operators and the mine workers, to work for improvement in the industry. The work and duties of this economic council, as it were, should encompass the following:

(a) To recognize the impossibility of effecting stability and prosperity in the anthracite industry by wage reductions.

(b) To strive for conditions in the industry which will give a proper return to capital invested therein and will protect and advance the living standards of those employed in the industry.

(c) To take such steps as may be necessary to lessen the prodigious number of fatalities and injuries now occurring in the industry.

(d) To promote a sales policy which will destroy the wastes of competition and yield the best returns.

(e) To work for a scientific readjustment of coal freight rates.

(f) To protect the industry by opposing adverse tax legislation and to encourage the enactment of legislation which may be mutually determined to be of value to the industry.

(g) And to unite in every practical way for the advancement of the industry and the increased sale and consumption of its products.

One of the powers conferred upon our board was that we may enlarge the board to an odd number, in which event a majority vote shall be binding. I would not concur in the request of Mr. Rublee to add an odd number because it is optional and discretionary on the part of the two members of the board to enter into such an agreement.

Mr. Rublee's report is, in part, as follows:

According to figures presented by the operators, which I was informed were compiled, except for the year 1932, from the reports of the mine inspectors of the State of Pennsylvania, and for 1932 were obtained directly from the operators, operating companies now employing 250 men or more each in 1927, had 188 collieries in operation employing 148,486 men; in 1929 the same companies had in operation 163 collieries employing 137,398 men; in 1931, they had 147 collieries in operation employing 123,388 men; in October, 1932, they had 113 collieries in operation employing 85,120 men. These figures indicate how steady and drastic the reduction in operations and employment has been.

The facts which are stated above indicate an extremely serious condition in the anthracite industry. It has been losing its markets for many years and recently at an alarming rate. The loss of these markets can be attributed only in part to the depression, since the competitive fuels have been greatly extending their markets in spite of the depression. The inroads of the competitive fuels into the anthracite market began long before the depression and there is no reason to suppose they would cease if the depression ended, unless the price of anthracite were reduced to an extent that would enable it to compete. It appears to be the view of both the operators and the miners that anthracite has certain advantages over other fuels. If this is so, price must be the consideration which mainly influences the average consumer in his choice of other fuel. The only thing, therefore, that can be done effectively to restore the market for anthracite, or even to enable it to maintain its present volume of sales, is a reduction of the price to the consumer.

In order to lower the price to the consumer costs must be reduced. The costs to be considered fall into three categories:

- (1) The mine costs.
- (2) The cost of transportation, or the freight charges.
- (3) The cost of distribution, including wholesalers' and retailers' costs.

The operators have recognized that costs of transportation and of distribution must be reduced, as well as the labor cost in the mines, to afford the reduction in price to the consumer necessary to increase sales and thus to start production up again and restore prosperity in the industry. If it were possible, these costs ought to be reduced simultaneously so that their combined effect could be at once reflected in the price of coal to the consumers. Reductions in all three classes of costs are necessary. An immediate reduction in freight rates, however, can hardly be expected and reduction in distribution costs is necessarily a gradual process. In the case of freight rates, either the consent of the railroads, which are suffering under their own financial difficulties, or the action of the Interstate Commerce Commission is required. In regard to the distribution some modification and improvement of existing methods will have to be worked out. One of the factors which affects this matter and which involves expense is the increasing service which it is considered necessary to give to the consumer. The process of reducing freight and dealer costs is thus one which will take time and will call for the cooperation of many individual organizations.

It is apparent that no substantial reduction of mine costs can be effected without also reducing the large item of cost of labor coming under the wage agreement. The consolidated production cost per ton was reduced from \$3.65 a ton to \$2.70, without any reduction in wage rates. This has been brought about largely by the closing of the higher cost collieries, new mechanical equipment, purchased instead of generated power, and an increase in stripping operations. These economies did not succeed in stimulating production because they did not enable a reduction in prices to be made sufficient to attract the consumer. Sales and production continued to decline and the labor eliminated by the economies remained without employment. A more substantial reduction in price is manifestly necessary, and there is therefore immediate need for a wage reduction.

The operators estimate that if the 35 per cent reduction in the wage scale which they propose were put into effect this would permit a reduction in the retail prices of prepared sizes of anthracite of \$1 per ton. They further state that the necessary reduction in retail prices is materially more than this, and that the balance of the reduction will be effected by the lowering of freight rates, of distribution costs, and of other elements of mine costs, which they are doing everything possible to bring about. They point out that if the 35 per cent reduction were granted the real wages of the mine workers, due to the decrease in the cost of living and the increase in the purchasing power of the dollar, would be as high as they were in 1920, when the wage scale was fixed by the United States Anthracite Commission.

Finally, let me say to the operators and to the mine workers that from the general view of the industry which my work on the board has given me, it appears evident that the industry is in a critical condition, and that several times the reduction possible through the proposed modification of the wage scale would be required in the retail prices of the prepared sizes, to revive the prosperity of the industry and restore normal employment for the mine workers. Such a reduction must be dependent on a decrease in transportation and distribution costs as well as in the mine costs. The reduction in the wage scale can not alone provide it, but such a reduction would arrest the threatened demoralization of the industry and, I believe, prevent immediate loss of employment for thousands of workers. For this reason, in my judgment, the mine workers would do well to accept a reduction as a necessary step toward the revival of the industry. But it would not be a solution. I think both operators and mine workers realize this.

Both parties to this proceeding are dependent on the industry and have a common interest in preserving it. The fact that the effort through the creation of this board to take a forward step in that common interest has ended in a deadlock does not relieve you of the necessity of finding a solution. You can not suffer your industry to disintegrate. When you come together again in another effort, for that will surely happen, let me urge the mine workers to consider whether it would not be in their real interest to contribute a dollar a ton to the rescue of the industry, and let me as strongly urge the operators to do all in their power to enable them to assure the mine workers that their contribution will be multiplied several times and promptly passed on to the consumer. I believe that cooperation of this kind is indispensable for a solution of the industry's problem.

HOUSING

Building Operations in Principal Cities of the United States, February, 1933

ACCORDING to reports received by the United States Bureau of Labor Statistics from 758 identical cities in the United States having a population of 10,000 or over, there was a decrease of 46.4 per cent in indicated expenditures for total building operations in February, 1933, as compared with January, 1933.

This month, for the first time, the bureau shows building-permit data for cities in the United States having a population of 10,000 or over. Comparisons of February data with January data, as shown in Tables 1 to 3, are for cities having a population of 10,000 or over. Comparisons of February, 1933, with February, 1932, as shown in Tables 6 to 8, are for cities having a population of 25,000 or over. Table 9 shows data for all cities having a population of 10,000 or over from which reports were received by the bureau.

The cost figures as shown in the following tables apply to the cost of the buildings as estimated by the prospective builder on applying for his permit to build. No land costs are included. Only building operations within the corporate limits of the cities enumerated are shown.

Comparisons, January, 1933, and February, 1933

TABLE 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 758 identical cities of the United States having a population of 10,000 or over, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 758 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	January, 1933	February, 1933	Per cent of change	January, 1933	February, 1933	Per cent of change
New England.....	\$764,070	\$363,921	-52.4	\$637,590	\$476,422	-25.3
Middle Atlantic.....	1,732,751	4,272,991	+146.6	10,359,863	4,483,076	-56.7
East North Central.....	530,802	225,490	-57.5	633,652	1,685,139	+165.9
West North Central.....	181,558	177,700	-2.1	194,107	447,783	+130.7
South Atlantic.....	657,377	535,674	-18.5	778,215	1,512,471	+94.4
South Central.....	437,704	355,282	-18.8	3,437,556	1,678,010	-51.2
Mountain and Pacific.....	981,925	1,248,161	-27.1	17,338,489	850,486	-95.1
Total.....	5,286,187	7,179,219	+35.8	33,379,472	11,133,387	-66.6

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 758 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS—Continued

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	January, 1933	February, 1933	Per cent of change	January, 1933	February, 1933	Per cent of change	
New England.....	\$783,242	\$633,342	-19.1	\$2,184,902	\$1,473,685	-32.6	108
Middle Atlantic.....	2,514,767	2,082,424	-17.2	14,607,381	10,838,491	-25.8	167
East North Central.....	1,150,460	685,966	-40.4	2,314,914	2,506,595	+12.2	181
West North Central.....	384,253	265,733	-30.8	759,918	891,216	+17.3	74
South Atlantic.....	777,754	1,035,380	+33.1	2,213,346	3,083,525	+39.3	75
South Central.....	585,754	520,517	-11.1	4,461,014	2,553,809	-42.8	72
Mountain and Pacific.....	914,655	990,232	+8.3	19,235,069	3,088,879	-83.9	81
Total.....	7,110,885	6,213,594	-12.6	45,776,544	24,526,200	-46.4	758

According to reports received from these 758 cities, there was a decrease of 46.4 per cent in indicated expenditures for total building operations. Three of the geographic divisions, however, showed increases. Although the usual seasonal trend for residential building, as well as other classes of building, is downward, comparing February with January, there was an increase in indicated expenditures for residential building during February. The increase for this type of building was 35.8 per cent, comparing expenditures in February with those in the previous month.

Indicated expenditures for new nonresidential buildings decreased 66.6 per cent, comparing February with January. The estimated cost of additions, alterations, and repairs decreased 12.6 per cent comparing these two months.

Indicated expenditures for total building operations reached a total of \$24,526,200 during February, 1933, for these 758 cities.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 758 identical cities of the United States, by geographic divisions.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 758 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933
New England.....	160	88	368	336	1,228	1,035	1,756	1,459
Middle Atlantic.....	284	247	726	564	2,819	2,718	3,829	3,529
East North Central.....	117	56	508	404	1,536	1,188	2,161	1,648
West North Central.....	64	58	261	252	550	503	875	813
South Atlantic.....	198	157	471	399	1,828	1,701	2,497	2,257
South Central.....	224	168	385	293	1,386	1,281	1,995	1,742
Mountain and Pacific.....	262	299	768	773	2,550	2,765	3,580	3,837
Total.....	1,309	1,073	3,487	3,021	11,897	11,191	16,693	15,285
Per cent of change.....		-18.0		-13.4		-5.9		-8.4

Decreases were shown in the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations, comparing February reports with January reports for these 758 cities.

Table 3 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the estimated cost of such dwellings for which permits were issued in 758 identical cities, during January, 1933, and February, 1933, by geographic divisions.

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 758 IDENTICAL CITIES IN JANUARY AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933
New England	\$701,270	\$339,321	147	84	\$67,000	\$20,600	20	5
Middle Atlantic	1,254,467	964,241	247	215	253,284	166,250	64	44
East North Central	492,802	220,131	115	55	0	5,359	0	3
West North Central	161,358	165,200	60	55	17,200	9,500	6	4
South Atlantic	637,377	502,074	192	151	11,000	2,500	7	1
South Central	374,802	332,272	210	161	34,502	9,560	18	9
Mountain and Pacific	714,875	1,055,211	235	266	82,686	136,550	34	56
Total	4,336,951	3,578,450	1,206	987	465,672	350,319	149	122
Per cent of change		-17.5		-18.2		-24.8		-18.1

Geographic division	Multifamily dwellings				Total all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933	January, 1933	February, 1933
New England	\$14,000	\$8,000	6	8	\$782,270	\$367,921	173	97
Middle Atlantic	212,000	3,085,500	71	559	1,719,751	4,215,991	382	818
East North Central	0	0	0	0	492,802	225,490	115	58
West North Central	3,000	3,000	4	4	181,558	177,700	70	63
South Atlantic	9,000	31,100	10	21	657,377	535,674	209	173
South Central	26,500	5,000	20	4	435,804	346,832	248	174
Mountain and Pacific	184,364	56,400	45	37	981,925	1,248,161	314	359
Total	448,864	3,180,000	156	633	5,251,487	7,117,769	1,511	1,742
Per cent of change		+610.5		+305.8		+35.5		+15.3

Decreases were shown in both the indicated expenditures and in the total number of families provided for in 1-family dwellings and in 2-family dwellings. There was, however, a marked increase in the indicated expenditures for apartment houses and in the number of family-dwelling units provided in this type of dwelling.

Indicated expenditures for all types of dwellings showed an increase of 35.5 per cent, while the number of family-dwelling units provided increased 15.3 per cent.

Table 4 shows the index number of families provided for, the index numbers of indicated expenditures for new residential buildings, for

new nonresidential buildings, for additions, alterations, and repairs, and for total building operations.

TABLE 4.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES

[Monthly average, 1929 = 100]

Month	Families provided for	Estimated cost of—			
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	Total building operations
1930					
February	43.0	34.7	51.8	57.5	44.1
1931					
February	40.3	30.3	43.8	48.6	37.9
1932					
February	13.0	9.1	16.5	26.7	14.3
1933					
January	4.9	3.4	26.8	16.2	14.7
February	5.6	4.6	8.9	14.2	7.9

The index numbers for new residential buildings and for families provided for showed an increase in February as compared with January. The index numbers, however, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations showed a decrease for February as compared with January.

Comparisons of Indicated Expenditures for Public Buildings

TABLE 5 shows the value of contracts awarded for public buildings by the various agencies of the United States Government and by the various State governments during the months of February, 1932, and January and February, 1933, by geographic divisions.

TABLE 5.—CONTRACTS FOR PUBLIC BUILDINGS AWARDED BY THE UNITED STATES GOVERNMENT AND BY STATE GOVERNMENTS DURING FEBRUARY 1932, AND JANUARY AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	Federal			State		
	February, 1932	January, 1933	February, ¹ 1933	February, 1932	January, 1933	February, ¹ 1933
New England	\$398,252	\$344,722	\$533,943	\$32,697	0	0
Middle Atlantic	527,093	9,267,702	676,783	1,079,518	\$5,195,217	\$887,647
East North Central	506,911	226,856	1,390,655	175,670	50,512	413
West North Central	69,009	28,693	170,835	197,908	26,057	1,197
South Atlantic	1,014,204	620,891	1,514,235	239,813	429,378	88,615
South Central	2,611,666	3,496,849	1,103,723	357,014	334,084	9,520
Mountain and Pacific	1,273,468	2,602,776	750,021	458,793	127,095	15,247
Total	7,300,603	16,588,489	6,140,195	2,541,413	6,162,343	1,002,639

¹ Subject to revision.

The value of contracts awarded by the Federal Government during February, 1933, was \$6,140,195, a decrease of more than \$10,000,000 as compared with February, 1932.

The value of contracts awarded by the various State governments during February, 1933, was only \$1,002,639, a decrease of over \$5,000,000 as compared with January, 1933, and a decrease of over \$1,500,000 as compared with February, 1932.

Whenever a contract is awarded by either the Federal or a State government in a city having a population of 10,000 or over, the number or cost of such building is included in the tables shown herein.

Comparisons, February, 1933, with February, 1932

TABLE 6 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 351 identical cities of the United States having a population of 25,000 or over, for the months of February, 1933, and February, 1932, by geographic divisions.

TABLE 6.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 351 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN FEBRUARY, 1932, AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	February, 1932	February, 1933	Per cent of change	February, 1932	February, 1933	Per cent of change
New England.....	\$610,732	\$246,900	-59.6	\$1,660,835	\$263,755	-84.2
Middle Atlantic.....	4,907,147	4,036,241	-17.7	4,490,867	3,799,171	-15.4
East North Central.....	1,138,840	205,290	-82.0	5,037,645	1,672,287	-66.8
West North Central.....	647,795	133,900	-79.3	384,134	234,275	-39.0
South Atlantic.....	1,557,465	466,050	-70.1	2,203,920	1,455,211	-34.0
South Central.....	722,228	299,812	-58.5	2,197,494	1,432,755	-34.8
Mountain and Pacific.....	2,235,383	1,124,911	-49.7	3,417,856	732,811	-78.6
Total.....	11,819,500	6,513,104	-44.9	19,401,751	9,590,215	-50.6

Geographic division	Additions, alterations, and re-pairs (estimated cost)			Total construction (estimated cost)			Number of cities
	February, 1932	February, 1933	Per cent of change	February, 1932	February, 1933	Per cent of change	
New England.....	\$1,767,145	\$579,864	-67.2	\$4,047,712	\$1,000,519	-73.1	53
Middle Atlantic.....	2,986,662	1,922,619	-35.6	12,384,676	9,758,031	-21.2	70
East North Central.....	1,296,688	631,766	-51.3	7,473,173	2,509,293	-66.4	94
West North Central.....	503,890	225,797	-55.2	1,535,819	598,972	-61.3	25
South Atlantic.....	1,118,657	973,966	-12.9	4,880,042	2,895,227	-40.7	39
South Central.....	654,048	465,713	-28.8	3,573,770	2,198,280	-38.5	33
Mountain and Pacific.....	1,381,043	840,968	-39.1	7,034,282	2,698,690	-61.6	37
Total.....	9,708,133	5,640,693	-41.9	40,929,474	21,744,012	-46.9	351

Reports received from these 351 cities show that there were decreases in indicated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building construction, comparing February, 1933, with February, 1932.

Table 7 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 351 identical cities having a population of 25,000 or over, for the months of February, 1932, and February, 1933, by geographic divisions.

TABLE 7.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 351 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN FEBRUARY, 1932, AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	Febr- uary, 1932	Febr- uary, 1933	Febr- uary, 1932	Febr- uary, 1933	Febr- uary, 1932	Febr- uary, 1933	Febr- uary, 1932	Febr- uary, 1933
New England.....	105	57	260	200	1,079	899	1,444	1,156
Middle Atlantic.....	627	199	852	454	3,222	2,531	4,701	3,184
East North Central.....	211	49	830	354	1,821	1,124	2,862	1,527
West North Central.....	168	42	307	210	674	415	1,149	667
South Atlantic.....	255	127	450	326	2,085	1,510	2,790	1,963
South Central.....	302	130	485	260	1,577	1,148	2,364	1,538
Mountain and Pacific.....	582	269	982	680	2,896	2,469	4,460	3,418
Total.....	2,250	873	4,166	2,484	13,354	10,096	19,770	13,453
Per cent of change.....		-61.2		-40.4		-24.4		-32.0

Decreases in number were shown in all types of buildings, comparing February, 1933, with February, 1932.

Table 8 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the cost of such dwellings, for which permits were issued in 351 identical cities, in February, 1932, and February, 1933, by geographic divisions.

TABLE 8.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 351 IDENTICAL CITIES IN FEBRUARY, 1932, AND FEBRUARY, 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families pro- vided for		Estimated cost		Families pro- vided for	
	February, 1932	February, 1933	Febr- uary, 1932	Febr- uary, 1933	February, 1932	February, 1933	Febr- uary, 1932	Febr- uary, 1933
New England.....	\$524,232	\$241,900	96	56	\$86,500	\$5,000	17	2
Middle Atlantic.....	2,296,718	727,491	512	167	686,929	166,250	198	44
East North Central.....	900,790	199,931	196	48	83,550	5,359	23	3
West North Central.....	567,545	124,400	156	40	70,250	9,500	21	4
South Atlantic.....	1,069,265	437,450	243	122	57,200	2,500	19	1
South Central.....	611,542	285,402	281	127	66,225	5,960	30	4
Mountain and Pacific.....	1,921,856	938,961	535	237	169,527	136,550	69	56
Total.....	7,891,948	2,955,535	2,019	797	1,220,181	331,119	377	114
Per cent of change.....				-60.5		-72.9		-69.8
Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families pro- vided for		Estimated cost		Families pro- vided for	
	February, 1932	February, 1933	Febr- uary, 1932	Febr- uary, 1933	February, 1932	February, 1933	Febr- uary, 1932	Febr- uary, 1933
New England.....	0	0	0	0	\$610,732	\$246,900	113	58
Middle Atlantic.....	\$1,848,500	\$3,085,500	536	559	4,832,147	3,979,241	1,246	770
East North Central.....	69,500	0	16	0	1,053,840	205,290	235	51
West North Central.....	10,000	0	3	0	647,795	133,900	180	44
South Atlantic.....	431,000	26,100	82	18	1,557,465	406,060	344	141
South Central.....	44,461	0	21	0	722,228	291,362	332	131
Mountain and Pacific.....	144,000	49,400	68	33	2,235,383	1,124,911	672	326
Total.....	2,547,461	3,161,000	726	610	11,659,590	6,447,854	3,122	1,521
Per cent of change.....				-16.0		-44.7		-51.3

There was a decrease in both the number of families provided for and the estimated cost of 1-family dwellings and 2-family dwellings. Indicated expenditures for apartment houses, however, increased 24.1 per cent, although the number of family-dwelling units decreased 16.0 per cent. Indicated expenditures for housekeeping dwellings of all kinds decreased 44.7 per cent, while the number of family-dwelling units decreased 51.3 per cent, comparing February, 1933, with February, 1932.

Details by Cities

TABLE 9 shows the estimated cost of new residential buildings, of new nonresidential buildings, of total building operations, and the number of families provided for in new dwellings in each of the cities having a population of 10,000 or over for which reports were received in February, 1933.

Beginning with the month of January, 1933, the bureau extended the scope of its work on building operations to take in all cities in the United States having a population of 10,000 or over. Previous to that time, data were collected only from cities having a population of 25,000 or over.

Permits were issued during February, 1933, for the following important building projects: In the Borough of the Bronx for an apartment house to cost over \$3,000,000; in Austin, Tex., for a junior high school building to cost over \$300,000; in Sacramento, Calif., for a school building to cost nearly \$300,000; in the Borough of Manhattan for a hospital building to cost \$800,000; in Oneonta, N. Y., for a public-utilities building to cost \$300,000; in Rochester, N. Y., for a State hospital building to cost nearly \$800,000.

Contracts were awarded by the Supervising Architect of the United States Treasury Department for a post office in Columbus, Ohio, to cost over \$1,200,000; for a Federal courthouse in Fort Worth, Tex., to cost over \$600,000; and for an appraisers'-stores building in Baltimore, Md., to cost \$670,000.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933

New England States

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Connecticut:					Connecticut—Continued.				
Ansonia	0	\$825	\$1,625	0	New Britain	\$3,000	0	\$10,890	1
Bridgeport	0	2,755	11,485	0	New Haven	10,000	\$1,825	26,444	1
Bristol	0	1,000	4,910	0	Norwalk	12,700	10,310	25,665	3
Danbury	\$12,600	500	13,750	3	Norwich	0	735	8,843	0
Derby	0	400	400	0	Shelton	0	25	125	0
East Hartford	4,000	175	5,085	1	Stamford	5,000	290	12,240	1
Fairfield ¹	50,900	150	67,450	7	Stratford	1,196	1,570	3,046	1
Greenwich	21,700	600	31,600	3	Torrington	0	0	105	0
Hamden	4,600	350	5,700	1	Wallingford	0	0	480	0
Hartford	7,000	2,730	47,810	2	Waterbury	0	1,250	3,900	0
Manchester	1,600	875	4,240	1	West Hartford	10,500	175	20,455	2
Meriden	4,800	1,285	8,905	1	Willimantic	0	0	0	0
Middletown	12,500	215	12,930	3					
Milford	2,900	3,210	7,790	1					

¹ Schedule received for the first time, February, 1933; not included in totals.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

New England States—Continued

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Maine:					Massachusetts—Continued.				
Auburn	0	\$875	\$875	0	Plymouth	0	\$1,800	\$2,300	0
Lewiston	0	0	0	0	Quincy	\$15,000	625	22,126	2
Portland	0	750	21,955	0	Revere	4,000	575	9,925	1
Sanford	0	0	0	0	Salem	0	800	13,165	0
South Portland	0	275	275	0	Saugus	0	900	900	0
Massachusetts:					Somerville	0	1,000	2,780	0
Arlington	\$23,800	3,000	27,650	5	Southbridge	8,000	0	8,000	1
Attleboro	0	0	0	0	Springfield	6,800	660	11,945	3
Belmont	8,500	500	11,700	1	Stoneham	0	0	3,310	0
Beverly	0	525	2,575	0	Swampscott	5,000	1,000	6,000	1
Boston ²	59,300	11,075	261,642	13	Taunton	500	140	1,455	1
Brantree	0	802	3,567	0	Waltham	500	475	3,325	1
Brockton	4,500	400	14,955	1	Watertown	0	4,000	18,365	0
Brookline	6,000	0	10,490	1	Wellesley	5,100	200	7,750	2
Cambridge	0	162,000	179,295	0	Westfield	0	0	0	0
Chelsea	0	0	1,875	0	West Springfield	3,500	225	3,975	1
Chicopee	0	200	675	0	Winchester	6,000	258	7,808	1
Dedham	0	5,600	5,600	0	Winthrop	0	500	2,035	0
Easthampton	0	0	0	0	Woburn	2,500	0	3,320	1
Everett	0	325	1,425	0	Worcester	7,700	850	26,592	2
Fall River	0	320	4,020	0	New Hampshire:				
Fitchburg	4,600	575	8,175	2	Claremont	0	0	0	0
Framingham	3,225	150	7,385	2	Concord	6,500	850	8,925	3
Gardner	0	2,100	2,900	0	Keene	5,500	0	5,500	2
Gloucester	3,000	200	4,100	1	Manchester	3,000	5,680	19,440	1
Haverhill	0	1,600	2,000	0	Rhode Island:				
Holyoke	0	1,250	2,650	0	Central Falls	0	50	240	0
Lawrence	0	650	5,755	0	Cranston	6,000	1,475	7,850	2
Leominster	0	2,175	3,475	0	East Providence	0	1,000	9,005	0
Lowell	3,000	250	15,060	1	Newport	0	3,050	7,970	0
Lynn	0	275	9,305	0	North Providence	5,000	21,300	26,400	1
Malden	0	3,600	9,365	0	Providence	0	3,550	53,550	0
Marlborough	0	6,000	6,000	0	Warwick	6,200	5,000	11,800	2
Medford	0	6,300	9,925	0	Westerly	0	0	2,485	0
Melrose	0	575	950	0	West Warwick	0	0	0	0
Methuen	0	785	785	0	Woonsocket	4,000	285	8,235	1
Milton	6,200	1,275	11,105	3	Vermont:				
Natick	0	1,000	7,500	0	Bennington	0	0	0	0
Needham	6,000	300	8,400	1	Burlington	4,500	0	4,700	1
New Bedford	0	1,950	6,900	0	Rutland	0	600	800	0
Newburyport	0	1,700	1,700	0	Total	363,921	476,422	1,473,685	97
Newton	12,500	925	28,475	3					
North Adams	0	15	50	0					
Northampton	0	66,162	66,162	0					
North Attleborough	8,000	450	8,450	8					
Norwood	0	81,350	84,025	0					
Pittsfield	0	20,500	32,350	0					

Middle Atlantic States

New Jersey:					New Jersey—Continued.				
Bayonne	\$7,000	\$250	\$12,370	3	Jersey City	\$10,500	\$3,350	\$27,904	3
Belleville	0	0	150	0	Kearney	0	50	3,825	0
Bloomfield	0	0	1,400	0	Linden	2,500	0	2,500	1
Bridgeton	0	385	385	0	Long Branch	0	805	2,555	0
Burlington	0	550	2,025	0	Lyndhurst	0	450	1,775	0
Camden	0	11,410	11,715	0	Maplewood	0	1,800	2,850	0
Clifton	0	700	18,800	0	Montclair	39,300	0	40,375	3
Dover	0	1,800	5,800	0	Morristown	0	1,000	5,893	0
East Orange	0	2,150	5,642	0	Neptune ²	0	0	0	0
Elizabeth	5,000	11,000	16,000	1	Newark	7,000	100,218	173,168	1
Englewood	0	750	1,950	0	New Brunswick	0	130	1,160	0
Garfield	0	550	1,350	0	Harrison	0	3,050	3,600	0
Hackensack	0	375	6,579	0	Orange	0	1,600	5,191	0
Harrison	0	0	27,795	0	Passaic	7,500	1,000	19,915	1
Hillside	0	525	1,825	0	Paterson	0	740	31,675	0
Hoboken	0	0	4,096	0					
Irvington	0	3,760	4,985	0					

Applications filed.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

Middle Atlantic States—Continued

Fami- lies pro- vided for	City and State	New resi- dential build- ings	New nonresi- dential build- ings	Total (includ- ing re- pairs)	Fami- lies pro- vided for	City and State	New resi- dential build- ings	New nonresi- dential build- ings	Total (includ- ing re- pairs)	Fami- lies pro- vided for
0	New Jersey— Continued.					New York— Continued.				
2	Perth Amboy	\$3,500	0	\$5,400	1	Oswego	\$700	0	\$2,416	1
1	Phillipsburg	0	0	0	0	Peekskill	0	\$16,250	17,600	0
0	Plainfield	0	0	152,300	0	Plattsburg	3,500	0	3,500	1
0	Pleasantville	0	0	0	0	Port Jervis	0	0	0	0
0	Rahway	0	0	0	0	Poughkeepsie	3,500	0	12,175	1
1	Red Bank	0	0	0	0	Rensselaer	4,200	0	8,800	1
3	Ridgefield Park	0	0	0	0	Rochester	0	774,794	812,194	0
0	Ridgewood	0	\$350	475	0	Rockville Center	32,700	0	34,195	6
1	Roselle	5,100	400	8,100	1	Saratoga Springs	5,100	0	5,100	1
1	Rutherford	56,000	400	58,450	20	Schenectady	1,500	2,080	11,458	1
0	South Orange	0	300	2,945	0	Syracuse	8,500	1,200	21,189	2
2	South River	0	0	0	0	Tonawanda	0	0	0	0
0	Summit	0	1,450	6,650	0	Troy	4,500	2,250	11,180	1
1	Teaneck	35,750	1,160	41,195	5	Utica	0	0	10,425	0
1	Trenton	0	670	10,910	0	Watertown	0	100	115	0
1	Union	21,600	1,090	23,255	6	White Plains	6,000	200	8,350	1
0	Union City	0	8,300	22,669	0	Yonkers	72,000	57,900	139,375	11
1	Weehawken	0	400	5,800	0	Pennsylvania:				
2	Westfield	4,000	445	4,870	1	Abington	3,000	500	7,180	1
2	West New York	0	0	415	0	Allentown	0	346,090	361,155	0
0	West Orange	0	150	4,725	0	Altoona	0	3,325	16,095	0
3	New York:					Arnold	0	0	0	0
2	Albany	60,500	67,650	159,405	8	Bellevue	0	0	300	0
1	Amsterdam	0	1,000	1,000	0	Berwick	0	200	1,000	0
0	Auburn	0	0	9,025	0	Bethlehem	0	2,625	2,625	0
0	Binghamton	9,000	23,922	52,248	2	Braddock	0	0	0	0
2	Buffalo	0	45,410	72,472	0	Bradford	0	245	770	0
0	Cohoes	0	0	0	Bristol	0	0	2,000	0	
0	Corning	0	0	1,525	0	Butler	0	300	3,625	0
0	Dunkirk	0	0	30	Canonsburg	8,500	150,000	158,500	2	
1	Elmira	0	1,375	3,713	0	Carlisle	0	0	100	0
0	Endicott	0	5,100	8,130	0	Charleroi	0	0	0	0
1	Floral Park	18,500	0	18,500	3	Chester	0	0	13,825	0
0	Freeport	0	5,100	6,400	0	Coatesville	0	152,598	152,598	0
0	Fulton	0	0	700	0	Connellsville	0	0	1,300	0
0	Glen Cove	0	975	1,375	0	Conshohocken	0	500	500	0
0	Glens Falls	3,500	200	14,896	1	Coraopolis	0	0	0	0
1	Gloversville	0	4,700	5,700	0	Donora	0	0	0	0
0	Hempstead	5,600	98,155	104,155	2	Du Bois	0	0	0	0
0	Irondequoit	7,200	730	8,155	2	Duquesne	0	0	500	0
1	Ithaca	11,300	0	21,440	2	Easton	0	175	12,475	0
0	Jamestown	2,200	100	4,345	1	Ellwood City	0	0	5,000	0
0	Johnson City	0	0	0	Erie	4,000	5,100	16,754	1	
0	Kenmore	0	0	300	0	Greensburg	0	0	7,000	0
1	Kingston	3,500	3,390	10,835	1	Harrisburg	8,650	575	17,265	2
0	Lackawanna	0	0	0	Haverford	0	680	2,340	0	
0	Lockport	0	0	2,875	0	Hazleton	0	0	0	0
0	Lynbrook	0	325	525	0	Homestead	0	0	100	0
0	Mamaroneck	0	75	1,025	0	Jeannette	0	0	500	0
1	Middletown	11,800	1,075	12,975	3	Johnstown	0	470	2,700	0
0	Mount Ver- non	19,500	0	28,605	3	Kingston	0	200	550	0
0	Newburgh	9,500	0	12,022	2	Lancaster	2,500	150	5,400	1
0	New Rochelle	0	1,225	3,200	0	Latrobe	0	0	0	0
0	New York City:					Lower Merion	0	73,400	78,781	0
0	The Bronx	3,083,000	38,850	3,235,605	561	McKeesport	0	2,000	5,450	0
0	Brooklyn	168,000	330,245	815,456	37	Mc Kees Rocks	0	0	0	0
0	Manhattan	48,000	1,510,900	2,042,650	3	Mahanoy City	0	0	0	0
0	Queens	278,100	85,579	535,126	70	Meadville	0	0	2,778	0
0	Richmond	18,800	2,673	41,223	10	Monessen	0	0	400	0
0	Niagara Falls	5,000	600	11,866	1	Mount Leba- non	19,000	0	24,850	2
0	North Tona- wanda	1,200	800	2,000	1	Munhall	2,800	0	2,800	1
0	Olean	0	200	2,700	0	Nanticoke	3,450	0	7,650	1
0	Oneida	0	1,500	1,650	0	New Castle	0	0	0	0
0	Oneonta	20,200	300,200	329,800	4	New Kensing- ton	0	0	0	0
0	Ossining	0	0	1,000	0					0

¹ Schedule received for the first time, February, 1933; not included in totals.² Applications filed.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

Middle Atlantic States—Continued

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Pennsylvania—Continued.					Pennsylvania—Continued.				
Norristown	0	\$940	\$4,650	0	Swissvale	0	0	0	0
Oil City	0	450	1,950	0	Uniontown	0	\$100	\$1,000	0
Philadelphia	\$94,800	184,400	379,111	27	Vandergrift	0	0	0	0
Phoenixville	0	0	0	0	Warren	0	0	841	0
Pittsburgh	22,400	13,825	66,896	8	Washington	0	50	2,325	0
Pittston	0	0	0	0	Waynesboro	0	0	0	0
Pottstown	0	500	3,075	0	West Chester	0	3,685	4,035	0
Pottsville	0	0	0	0	Wilkinsburg	0	0	4,825	0
Reading	0	7,025	17,660	0	Williamsport	0	2,100	12,786	0
Scranton	19,541	7,250	34,737	.1	York	0	115,975	121,496	0
Sharon	0	1,300	3,950	0					
Sunbury	0	0	0	0					
					Total	\$4,272,991	4,483,076	10,838,491	818

East North Central States

Illinois:					Indiana:				
Alton	0	\$212	\$7,415	0	Bedford	0	0	\$1,200	0
Aurora	0	675	3,625	0	Connersville	0	0	0	0
Belleview	0	150	150	0	Crawfordsville	0	0	200	0
Berwyn	0	0	600	0	East Chicago	0	0	0	0
Bloomington	0	5,000	6,000	0	Elkhart	0	\$200	780	0
Blue Island	0	0	0	0	Elwood	0	0	0	0
Brookfield	0	0	0	0	Evansville	\$6,500	1,285	18,777	3
Cairo	0	0	0	0	Fort Wayne	3,200	300	6,993	1
Calumet City	0	0	0	0	Frankfort	0	75	275	0
Canton	\$2,500	0	2,600	1	Gary	0	0	0	0
Centralia	0	0	3,000	0	Goshen	0	0	0	0
Champaign	5,000	800	6,030	1	Hammond	0	90	6,390	0
Chicago	13,000	58,795	141,187	3	Huntington	0	15	560	0
Chicago Hts.	0	300	300	0	Indianapolis	5,600	4,682	53,586	1
Cicero	0	5,000	5,000	0	Kokomo	0	25	315	0
Danville	0	0	5,324	0	Lafayette	0	0	0	0
Decatur	0	6,575	6,925	0	La Porte	0	40	40	0
East St. Louis	3,000	4,390	7,940	1	Logansport	0	250	250	0
Elgin	0	850	1,520	0	Marion	0	1,500	4,800	0
Elmhurst	0	0	0	0	Michigan:				
Elmwood Park	0	0	0	0	City	0	0	680	0
Evanston	0	500	14,500	0	Mishawaka	0	225	240	0
Forest Park	0	300	300	0	Muncie	1,300	2,220	4,137	1
Freeport	3,150	0	4,150	2	New Castle	0	0	0	0
Granite City	0	400	400	0	Peru ¹	0	0	0	0
Harvey	0	100	100	0	Richmond	0	7,000	7,300	0
Higland Park	5,050	0	15,530	2	Shelbyville	0	0	0	0
Joliet	0	0	3,000	0	South Bend	0	20,390	33,525	0
Kankakee	0	0	0	0	Terre Haute	0	160	5,482	0
La Grange	0	0	2,400	0	Whiting	0	0	0	0
Maywood	0	0	21,360	0	Michigan:				
Melrose Park	0	300	3,000	0	Adrian	0	0	0	0
Moline	0	0	2,125	0	Ann Arbor	0	1,250	10,930	0
Mount Vernon	0	600	600	0	Battle Creek	0	1,150	3,550	0
Oak Park	0	0	2,250	0	Bay City	700	0	5,430	1
Ottawa	0	0	0	0	Benton Harbor	0	0	0	0
Park Ridge	0	0	850	0	Dearborn	0	75	1,875	0
Peoria	7,500	51,700	59,200	2	Detroit	10,359	32,783	74,633	4
Quincy	0	88	1,930	0	Escanaba	0	0	0	0
Rockford	0	4,300	15,436	0	Ferndale	0	0	150	0
Rock Island	0	0	692	0	Flint	3,456	0	26,191	1
Springfield	1,500	1,110	11,360	1	Grand Rapids	3,500	3,565	11,930	1
Sterling	0	0	3,250	0	Grosse Pointe Park	0	200	200	0
Streator	0	0	1,340	0	Hamtramck	0	0	800	0
Urbana	0	350	2,350	0	Higland Park	0	0	5,180	0
Waukegan	0	150	7,420	0	Holland	0	0	500	0
Wilmette	0	675	2,430	0	Iron Mountain	0	0	0	0
Winnetka	0	0	2,300	0					

¹ Schedule received for the first time, February, 1933; not included in totals.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

East North Central States—Continued

Fami lies pro vided for	City and State	New resi- dential build- ings	New nonresi- dential build- ings	Total (includ- ing re- pairs)	Fami- lies pro- vided for	City and State	New resi- dential build- ings	New nonresi- dential build- ings	Total (includ- ing re- pairs)	Fami- lies pro- vided for
0	Michigan—Con.					Ohio—Con.				
0	Ironwood	0	0	0	0	Lorain	0	\$50	\$3,125	0
0	Jackson	0	\$15	\$355	0	Mansfield	0	95	5,389	0
0	Kalamazoo	0	135	2,435	0	Marietta	0	250	1,000	0
0	Lansing	0	575	3,675	0	Marion	0	0	200	0
0	Lincoln Park	0	0	1,000	0	M a r t i n s				
0	Marquette	0	0	0	0	Ferry	0	0	0	0
0	Monroe	0	250	250	0	Massillon	0	0	1,700	0
0	Mount Clem- ens ¹	0	900	1,800	0	Middletown	0	150	2,265	0
0	Muskegon	0	0	1,925	0	Newark	\$2,000	125	2,125	1
0	M a s k e g o n Heights	0	47	447	0	Norwood	0	0	1,845	0
818	Owosso	0	0	0	0	Parma	0	135	135	0
0	Pontiac	0	0	1,760	0	Piqua	0	0	200	0
0	Port Huron	0	0	0	0	Portsmouth	0	100	100	0
0	River Rouge	0	0	0	0	Salem	0	0	0	0
0	Royal Oak	0	1,400	1,650	0	Sandusky	0	150	250	0
0	Saginaw	\$1,200	3,425	7,111	1	S h a k e r Heights	4,500	700	5,200	1
0	Traverse City	0	0	0	0	Springfield	0	275	725	0
0	Wyandotte	5,000	0	5,000	1	Steubenville	0	0	0	0
0	Ohio:					Struthers	0	0	0	0
0	Akron	8,500	1,075	17,950	2	Toledo	0	2,130	18,977	0
0	Alliance	0	0	50	0	Warren	0	700	1,385	0
0	Ashland	0	1,300	5,300	0	Wooster	0	0	0	0
0	Ashtabula	0	800	1,640	0	Xenia	0	75	75	0
0	Barberton	0	5,030	5,030	0	Youngstown	4,575	34,210	45,452	1
3	Bellaire	0	0	0	0	Zanesville	0	0	0	0
1	Bucyrus	0	0	0	0	Wisconsin:				
0	Cambridge	0	0	0	0	Beloit	0	0	675	0
0	Campbell	0	0	0	0	Cudahy	0	0	400	0
0	Canton	0	1,336	2,576	0	Eau Claire	0	0	0	0
0	Cincinnati	59,900	45,110	142,530	11	Fond du Lac	0	2,300	2,650	0
1	Cleveland	15,500	34,775	127,022	3	Green Bay	3,000	50	5,920	1
0	Cleveland Heights	8,000	250	13,750	2	Kenosha	0	3,225	5,125	0
0	Columbus	20,000	1,287,550	1,321,600	4	Madison	2,500	515	3,565	1
0	Cuyahoga Falls	0	300	300	0	Manitowoc	0	0	0	0
0	Dayton	0	18,175	27,440	0	Milwaukee	12,000	5,640	91,177	2
0	East Cleve- land	0	2,000	3,600	0	Oshkosh	0	7,131	9,456	0
0	Elyria	0	1,250	1,777	0	Racine	0	225	690	0
0	Euclid	0	100	1,300	0	Sheboygan	0	175	3,438	0
0	Findlay	0	0	200	0	Shorewood	0	0	950	0
0	Fostoria	0	0	0	0	South Mil- waukee	0	0	0	0
0	Fremont	0	0	300	0	Stevens Point	0	200	5,200	0
0	Garfield Heights	0	0	0	0	Superior	3,500	10	4,310	1
0	Hamilton	0	115	545	0	Two Rivers	0	110	110	0
0	Ironton	0	250	250	0	Waukesha	0	0	0	0
0	Lakewood	0	300	4,080	0	Wausau	0	0	0	0
0	Lima	0	50	300	0	Wauwatosa	0	0	4,775	0
						West Allis	0	0	2,040	0
						Total	225,490	1,685,139	2,596,595	58

West North Central States

Iowa:					Iowa—Contd.					
Ames	0	0	\$550	0	Mason City	0	\$300	\$1,925	0	
Boone	0	\$70	70	0	Muscatine	0	200	1,000	0	
Burlington	0	175	1,375	0	Ottumwa	\$4,500	0	9,500	1	
Cedar Rapids	\$7,050	1,655	11,318	2	Sioux City	1,500	5,050	9,200	1	
Council Bluffs	1,300	3,575	8,255	1	Waterloo	0	595	4,042	0	
Davenport	0	145	4,565	0	Kansas:					
Des Moines	0	4,585	15,280	0	Arkansas City	0	200	200	0	
Dubuque	0	1,100	3,250	0	Coffeyville	0	200	903	0	
Fort Dodge	0	525	1,725	0	Dodge City	0	250	250	0	
Fort Madison	0	0	0	0	Eldorado	9,000	1,200	14,305	6	
Iowa City	0	600	600	0	Emporia	0	0	1,275	0	
Keokuk	5,000	100	5,150	1	Fort Scott	0	0	0	0	
Marshalltown	0	500	5,700	0	Hutchinson	0	4,500	6,360	0	

¹ Schedule received for the first time, February, 1933; not included in totals.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

West North Central States—Continued

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Kansas—Con.					Missouri—Con.				
Independence	0	0	0	0	Maplewood	0	0	\$1,400	0
Kansas City	\$4,500	\$615	\$7,165	2	Moberly	0	\$10,307	10,307	0
Lawrence	500	1,575	2,075	1	St. Charles	\$3,000	715	3,715	1
Leavenworth	4,000	0	4,500	1	St. Joseph	0	5,500	23,610	0
Manhattan	0	0	0	0	St. Louis	65,300	8,960	122,925	17
Newton	0	0	1,870	0	Springfield	4,600	6,360	20,705	4
Pittsburg	0	0	0	0					
Topeka	4,350	3,360	8,905	3	Nebraska:				
Wichita	0	19,040	23,927	0	Beatrice	2,000	100	2,200	1
Minnesota:					Fremont	0	0	3,200	0
Albert Lea	0	0	0	0	Grand Island	0	1,200	2,170	0
Brainerd	0	0	0	0	Hastings	4,100	0	4,100	2
Duluth	1,500	144,337	158,082	1	Lincoln	2,000	2,475	6,175	2
Faribault	0	0	0	0	Norfolk	0	0	0	0
Hibbing	0	0	1,194	0	North Platte	0	12,000	12,000	0
Mankato	0	0	5,100	0	Omaha	11,300	6,085	26,830	4
Minneapolis	10,400	9,775	42,570	3	North Dakota:				
Rochester	4,000	163,500	167,500	1	Bismarck	0	0	0	0
Saint Cloud	0	0	360	0	Fargo	0	0	2,115	0
Saint Paul	15,600	588	45,568	3	Grand Forks	6,000	50	6,087	2
Winona	0	0	3,367	0	Minot	0	1,000	1,000	0
Missouri:					South Dakota:				
Cape Girardeau	3,000	0	3,000	1	Aberdeen	0	0	3,150	0
Hannibal	0	166	166	0	Huron	0	0	0	0
Independence	0	18,000	18,000	0	Mitchell	500	0	1,500	1
Jefferson City	2,700	450	5,300	1	Rapid City	0	300	330	0
Joplin	0	1,550	6,050	0	Sioux Falls	0	2,650	2,900	0
Kansas City	0	1,600	23,300	0	Total	177,700	447,783	891,216	63

South Atlantic States

Delaware:					North Carolina:				
Wilmington	\$16,000	\$300	\$37,672	4	Asheville	0	\$13,000	\$26,987	0
District of Columbia:					Charlotte	\$8,500	392,975	407,865	2
Washington	273,900	478,024	806,245	53	Concord	13,500	0	14,300	2
Florida:					Durham	6,700	0	9,125	5
Gainesville	0	4,630	6,430	0	Elizabeth City	0	0	0	0
Jacksonville	4,700	6,280	35,300	6	Fayetteville	0	1,800	2,100	0
Key West	0	0	862	0	Goldsboro	0	2,800	4,300	0
Lakeland	0	2,000	2,500	0	Greensboro	0	2,320	5,080	0
Miami	3,150	52,245	89,728	3	High Point	0	15,350	15,350	0
Orlando	0	430	6,790	0	Kinston	0	0	0	0
Pensacola	13,800	175	19,754	11	New Bern	0	0	1,385	0
Sanford	0	0	40	0	Raleigh	7,400	5,015	12,415	2
St. Augustine	0	0	850	0	Rocky Mount	0	30	2,690	0
St. Petersburg	6,500	4,400	22,400	2	Shelby	0	18,000	18,000	0
Tampa	0	6,500	19,695	0	Statesville	0	0	450	0
West Palm Beach	0	2,950	3,492	0	Thomasville	0	0	4,500	0
Georgia:					Wilmington	0	0	0	0
Athens	1,300	385	1,835	1	Wilson	0	0	0	0
Atlanta	8,450	2,590	32,925	11	Winston-Salem	0	9,865	16,150	0
Augusta	900	925	7,692	1	South Carolina:				
Brunswick	0	0	1,270	0	Anderson	750	0	1,610	1
Columbus	3,500	295	9,285	1	Charleston	0	5,200	13,449	0
Griffin	0	200	200	0	Columbia	1,200	1,750	10,675	2
Lagrange	0	0	340	0	Florence	4,100	0	5,500	2
Rome	8,000	4,200	21,935	5	Greenville	7,500	1,795	15,110	2
Savannah	5,750	250	6,240	2	Spartanburg	0	60	1,795	0
Maryland:					Virginia:				
Annapolis	3,874	2,375	9,749	1	Alexandria	20,300	2,250	30,846	5
Baltimore	60,000	705,600	1,015,047	23	Charlottesville	0	75	4,320	0
Cumberland	0	390	1,575	0	Danville	1,500	965	6,175	2
Frederick	0	100	3,727	0	Hopewell	500	30	560	1
Hagerstown	0	305	1,405	0	Lynchburg	2,500	315	14,913	1
Salisbury	0	3,725	7,675	0	Newport News	2,300	3,758	9,312	2

¹ Schedule received for the first time February, 1933; not included in totals.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

South Atlantic States—Continued

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Virginia—Con.					West Virginia—Continued.				
Norfolk	\$28,350	\$9,755	\$60,202	12	Clarksburg	0	\$2,325	\$4,950	0
Petersburg	1,000	520	1,679	1	Fairmont	0	120	820	0
Portsmouth	0	450	3,318	0	Huntington	0	60	1,070	0
Richmond	10,250	22,855	45,333	4	Martinsburg	\$2,000	8,000	10,835	1
Roanoke	7,500	90	9,847	2	Morgantown	0	4,575	5,170	0
Staunton ¹	0	3,000	6,050	0	Parkersburg	0	1,460	3,160	0
Suffolk	0	125	1,825	0	Wheeling	0	4,800	12,700	0
Winchester	0	50	50	0					
West Virginia:					Total	535,674	1,512,471	3,083,525	173
Bluefield	0	200	235	0					
Charleston	0	0	4,751	0					

South Central States

Alabama:					Oklahoma—Continued.				
Bessemer	0	0	\$200	0	Sapulpa	0	0	0	0
Birmingham	0	\$8,295	37,580	0	Seminole	0	0	0	0
Decatur	0	1,500	1,750	0	Shawnee	0	\$300	\$2,035	0
Dothan	\$3,200	100	6,000	2	Tulsa	\$2,900	11,450	19,094	3
Fairfield	0	0	435	0	Tennessee:				
Huntsville ¹	1,800	0	1,800	3	Chattanooga	5,950	0	21,002	3
Mobile	6,700	0	12,451	9	Jackson	0	825	825	0
Montgomery	0	1,000	9,095	0	Johnson City	2,500	50	2,550	1
Selma	0	175	350	0	Kingsport	0	50	50	0
Arkansas:					Knoxville	0	1,354	4,534	0
Blytheville	2,000	0	2,000	2	Memphis	9,750	1,690	55,770	2
El Dorado	0	0	75	0	Nashville	7,000	27,540	46,703	4
Hot Springs	31,130	7,750	44,035	18	Texas:				
Little Rock	0	1,270	15,159	0	Abilene	0	0	1,500	0
Pine Bluff	0	0	2,500	0	Amarillo	0	90	740	0
Kentucky:					Austin	39,557	333,134	385,644	23
Ashland	0	0	0	0	Beaumont	8,200	17,532	30,635	4
Henderson	0	0	0	0	Big Spring	0	0	1,054	0
Lexington	7,000	2,480	56,727	1	Brownwood	0	0	500	0
Louisville	14,500	2,525	32,850	2	Corsicana	3,000	1,750	5,250	1
Newport	0	0	0	0	Dallas	16,550	224,104	272,839	9
Paducah	0	4,000	5,900	0	Del Rio	0	1,110	2,744	0
Louisiana:					Denison	0	0	800	0
Baton Rouge	1,540	0	72,608	2	El Paso	3,850	39,600	47,380	1
New Orleans	16,250	65,243	107,017	8	Fort Worth	33,000	624,800	670,045	10
Shreveport	12,509	3,333	34,137	5	Galveston	3,500	15,748	24,855	4
Mississippi:					Greenville	0	0	450	0
Clarksdale	0	0	3,700	0	Harlingen	0	74,825	75,275	0
Columbus	0	0	0	0	Houston	68,100	33,050	111,375	14
Greenville	3,000	1,000	16,000	1	Palestine	3,905	0	4,905	2
Greenwood	0	0	450	0	Pampa	0	131,380	134,880	0
Gulfport	0	150	1,025	0	Port Arthur	0	70	2,770	0
Hattiesburg	0	0	0	0	San Angelo	0	1,250	3,500	0
Jackson	12,025	0	19,220	7	San Antonio	8,931	3,315	35,683	16
Meridian	0	0	2,800	0	Sherman	600	0	600	1
Vicksburg	600	3,000	3,600	1	Sweetwater	0	100	700	0
Oklahoma:					Tyler	8,035	20,990	38,316	15
Ada ¹	1,500	1,600	3,100	1	Waco	1,500	160	17,190	2
Bartlesville	0	250	250	0	Wichita Falls	0	897	4,662	0
Enid	0	200	2,240	0	Total	355,282	1,678,010	2,553,809	174
McAlester	0	0	475	0					
Oklahoma City	18,000	8,575	36,235	1					

¹ Schedule received for the first time, February, 1933; not included in totals.

TABLE 9.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, FEBRUARY, 1933—Continued

Mountain and Pacific States

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for	City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Arizona:					Colorado:				
Phoenix	\$5,200	\$7,280	\$21,485	4	Boulder	0	\$100	\$540	0
Tucson	0	585	2,963	0	Colorado Springs	0	460	4,710	0
California:					Denver	\$42,000	10,250	85,370	8
Alameda	14,600	243	16,913	4	Fort Collins	0	0	1,250	0
Alhambra	14,000	1,300	23,700	6	Grand Junction	0	265	1,290	0
Bakersfield	5,800	675	11,348	2	Greeley	0	0	32,977	0
Berkeley	9,900	965	30,154	4	Pueblo	500	518	2,463	1
Beverly Hills	82,000	12,900	112,150	13	Idaho:				
Brawley	1,000	0	1,345	1	Boise	0	0	2,699	0
Burlingame	0	0	4,900	0	Montana:				
Compton	3,150	5,075	9,125	2	Anaconda	0	0	0	0
Eureka	0	1,100	2,520	0	Billings	0	300	300	0
Fresno	6,600	10,044	32,428	3	Butte	0	0	0	0
Fullerton	0	1,650	4,070	0	Great Falls	0	0	9,400	0
Gardena	1,000	55	1,525	2	Helena	1,500	50	2,060	2
Glendale	24,000	11,156	36,936	6	Missoula	0	120	2,920	0
Huntington Park	5,400	7,000	13,425	3	Nevada:				
Inglewood	1,200	600	2,375	1	Reno	0	0	5,169	0
Long Beach	31,800	31,495	129,340	14	New Mexico:				
Los Angeles	339,611	157,832	701,579	150	Albuquerque	2,500	1,350	7,860	1
Modesto	0	40	1,680	0	Roswell	5,000	6,500	16,500	2
Monrovia	0	275	2,013	0	Santa Fe	0	800	13,588	0
Oakland	34,000	22,253	116,268	11	Oregon:				
Ontario	1,500	5,350	7,575	1	Astoria	0	10	446	0
Palo Alto	7,200	45,500	54,775	1	Eugene	2,000	0	2,000	1
Pasadena	54,300	17,468	91,358	6	Klamath Falls	0	10,000	11,510	0
Pomona	0	0	0	0	Medford	0	1,000	1,150	0
Redlands ¹	0	0	1,712	0	Portland	29,950	34,165	100,625	9
Richmond	0	12,375	14,475	0	Utah:				
Riverside	0	19,500	25,492	0	Ogden	0	0	0	0
Sacramento	33,400	287,755	348,172	12	Provo	0	300	500	0
Salinas	0	435	2,840	0	Salt Lake City	0	1,100	12,775	0
San Bernardino	0	0	5,030	0	Washington:				
San Diego	28,550	8,927	75,927	12	Aberdeen	0	200	780	0
San Francisco	125,150	49,722	325,545	38	Bellingham	600	12,975	16,025	1
San Jose	12,800	14,955	40,095	7	Bremerton	5,500	4,335	17,035	2
Santa Ana	11,000	0	12,930	3	Hoquiam	0	50	325	0
Santa Barbara	254,000	13,035	270,545	2	Longview	0	25	1,025	0
Santa Monica	13,000	1,908	18,900	3	Olympia	1,000	1,665	7,487	1
Santa Rosa	7,700	2,400	23,075	2	Port Angeles	0	0	0	0
South Gate	3,500	2,000	8,800	2	Seattle	2,100	2,150	48,430	4
South Pasadena	0	2,200	8,205	0	Spokane	0	380	6,157	0
Stockton	2,400	4,345	14,668	2	Tacoma	8,750	1,020	22,712	7
Vallejo	13,000	0	16,962	3	Wenatchee	0	0	30	0
Whittier	0	0	6,725	0	Yakima	0	0	435	0
					Total	1,248,161	850,486	3,088,879	359

Hawaii

City and State	New residential buildings	New nonresidential buildings	Total (including repairs)	Families provided for
Honolulu	\$98,785	\$18,229	\$132,049	51

¹ Schedule received for the first time, February, 1933; not included in totals.

Building Operations in Principal Cities in 1932**Part 2. Types of Buildings**

BUILDING permit reports have been received by the Bureau of Labor Statistics from 370 cities of the United States having a population of 25,000 or over, for the calendar year 1932.

It was necessary to send agents of the bureau to only two of these cities to compile reports from records on file in the offices of the local building officials, all of the other 368 cities having replied to questionnaires sent by mail. This is quite a contrast with the earlier experience in collecting this information. For example, in 1922 it was necessary for agents of the bureau to visit 33½ per cent of the cities to compile data for that year. This proportion was reduced to 6.1 per cent in 1928; to 2.6 per cent in 1929; to 1.9 per cent in 1930; to eight-tenths of 1 per cent in 1931; and to less than six-tenths of 1 per cent in 1932. From this record it will be seen that local building officials are fully alive to the value of published reports on building permits and are lending their assistance to the work of the bureau.

The States of Illinois, Massachusetts, New York, New Jersey, and Pennsylvania, through their departments of labor, are cooperating with the United States Bureau of Labor Statistics in the collection of these data. In studying the following tables, it should be borne in mind that the figures refer to the cost of the buildings only, and to buildings within the corporate limits of the cities enumerated. No land costs are included.

Table 1 shows the total number of new buildings; the estimated cost of the different kinds of new buildings for which permits were issued in these 370 cities for the year 1932; the per cent that each kind forms of the total number; the per cent that the cost of each kind forms of the total cost; and the average cost per building.

In the 370 cities for which reports were received for the calendar year 1932, permits were issued for 92,790 new buildings, having an estimated cost of \$414,216,510. Of the total number of new buildings, 27 per cent were residential buildings and 73 per cent were nonresidential buildings. By far the most numerous class of residential buildings was 1-family dwellings. They form 24.4 per cent of the total number of new buildings. Two-family dwellings were the only other class of residential buildings, comprising more than 1 per cent of the total number of new buildings. In the nonresidential group, private garages were the most numerous, followed in order by sheds and stores and warehouses.

Of the indicated expenditures for new buildings during the year 1932, 27.7 per cent were for residential buildings and 72.3 per cent for nonresidential buildings. One-family dwellings accounted for the largest expenditure in the residential group and were exceeded only by one class of nonresidential buildings, public buildings. Of the residential group, indicated expenditures for apartment houses ranked next to 1-family dwellings. The expenditures for apartment houses, however, were only slightly more than one-seventh of the expenditures for 1-family dwellings.

TABLE 1.—NUMBER AND COST OF NEW BUILDINGS AS STATED BY PERMITS ISSUED IN 370 CITIES, 1932, BY KIND OF BUILDING

Kind of building	New buildings for which permits were issued				
	Num- ber	Per cent	Estimated cost		
			Amount	Per cent	Average per build- ing
<i>Residential buildings</i>					
1-family dwellings	22,646	24.4	\$87,641,137	21.2	\$3,870
2-family dwellings	1,659	1.8	10,137,180	.2.4	6,110
1-family and 2-family dwellings with stores combined	242	.3	1,478,390	.4	6,109
Multifamily dwellings	432	.5	13,041,670	3.1	3,019
Multifamily dwellings with stores combined	33	(1)	571,565	.1	17,320
Hotels	6	(1)	205,000	(1)	34,167
Lodging houses	12	(1)	132,300	(1)	11,025
All other	18	(1)	1,678,192	.4	93,233
Total	25,048	27.0	114,885,434	27.7	4,587
<i>Nonresidential buildings</i>					
Amusement buildings	380	.4	12,879,012	3.1	33,892
Churches	267	.3	9,089,325	2.2	34,042
Factories and work shops	826	.9	17,601,371	4.2	21,309
Public garages	361	.4	2,666,452	.6	7,386
Private garages	44,816	48.3	10,772,569	2.6	2,401
Service stations	3,294	3.5	6,848,354	1.7	2,079
Institutions	118	.1	17,184,722	4.1	145,633
Office buildings	135	.1	10,316,101	2.5	76,416
Public buildings	228	.2	106,836,685	25.8	468,582
Public works and utilities	314	.3	25,650,660	6.2	81,690
Schools and libraries	207	.2	44,333,234	10.7	214,170
Sheds	10,315	11.1	2,547,102	.6	247
Stables and barns	287	.3	333,301	.1	1,161
Stores and warehouses	4,790	5.2	26,766,913	6.5	5,588
All other	1,404	1.5	5,505,275	1.3	3,921
Total	67,742	73.0	299,331,076	72.3	4,419
Grand total	92,790	100.0	414,216,510	100.0	4,464

¹ Less than one-tenth of 1 per cent.

Indicated expenditures for public buildings were higher than for any other class in the nonresidential group. Schools and libraries ranked next, and stores and warehouses third. If we group public buildings, public works and utilities, institutional buildings, and schools and libraries, which are wholly or partially erected from public funds, we find that 46.8 per cent of the total indicated expenditures for new buildings during 1932 were accounted for by buildings of these classes.

The average cost of all new buildings for which permits were issued during 1932 was \$4,464. The average cost of new residential buildings was \$4,587. The most expensive class of residential buildings was "all other." This group includes such buildings as clubs with bedrooms, college dormitories, Y. M. C. A. and Y. W. C. A. buildings with bedrooms, etc. Hotels ranked second in average cost in the residential group.

New nonresidential buildings cost \$4,419 apiece. If, however, we exclude from the nonresidential group private garages and sheds, of which there are a great number, we find that the average cost of the remaining buildings in the nonresidential group is \$22,680. Public buildings, the most expensive type in this group, averaged \$468,582 per building. This was more than twice the cost of schools and libraries, the second most expensive class.

Building Trend, 1931 and 1932

TABLE 2 shows the number and cost of the different kinds of buildings for which permits were issued in 360 identical cities for the years 1931 and 1932, and the per cent of increase or decrease in 1932 as compared with 1931. It will be observed that the number of cities differs from the number in Table 1.

TABLE 2.—NUMBER AND COST OF NEW BUILDINGS AND OF ALTERATIONS AND REPAIRS FOR WHICH PERMITS WERE ISSUED IN 360 IDENTICAL CITIES DURING 1931 AND 1932, BY KIND OF BUILDING

Kind of building	Buildings for which permits were issued				Per cent of increase (+) or decrease (-) in 1932 compared with 1931	
	1931		1932			
	Number	Cost	Number	Cost	Number	Cost
<i>Residential buildings</i>						
1-family dwellings	55,010	\$260,880,240	22,328	\$85,742,247	-59.4	-67.1
2-family dwellings	5,608	38,888,388	1,653	10,097,680	-70.5	-74.0
1-family and 2-family dwellings with stores combined	541	3,952,649	239	1,466,290	-55.8	-62.9
Multifamily dwellings	2,177	132,932,724	432	13,041,670	-80.2	-90.2
Multifamily dwellings with stores combined	99	9,452,626	33	571,565	-66.7	-94.0
Hotels	20	2,304,824	6	205,000	-70.0	-91.1
Lodging houses	10	335,800	12	132,300	+20.0	-60.6
All other	91	9,829,934	18	1,678,192	-80.2	-82.9
Total residential buildings	63,556	458,577,185	24,721	112,934,944	-61.1	-75.4
<i>Nonresidential buildings</i>						
Amusement buildings	551	24,079,518	375	12,715,193	-32.0	-47.2
Churches	498	19,099,885	266	9,064,325	-46.6	-52.5
Factories and workshops	1,552	49,275,048	818	17,577,071	-47.3	-84.3
Public garages	1,002	11,127,302	357	2,648,302	-67.3	-76.2
Private garages	81,442	24,006,858	44,441	10,660,371	-45.4	-55.8
Service stations	3,905	10,550,997	3,252	6,738,095	-16.7	-36.1
Institutions	247	58,426,078	117	16,805,722	-52.6	-71.2
Office buildings	286	107,293,293	135	10,316,101	-52.8	-90.4
Public buildings	409	129,384,129	227	106,787,685	-44.5	-17.5
Public works and utilities	493	44,231,932	314	25,650,660	-36.3	-42.0
Schools and libraries	575	113,696,583	206	43,893,016	-64.2	-61.4
Sheds	9,704	2,906,075	10,240	2,532,774	+5.5	-12.8
Stables and barns	268	487,579	282	325,026	+5.2	-33.3
Stores and warehouses	7,170	67,108,453	4,748	26,033,932	-33.8	-61.2
All other	2,714	2,816,973	1,402	5,504,975	-48.3	+95.4
Total nonresidential buildings	110,906	664,580,703	67,180	297,253,248	-30.4	-55.3
Total new buildings	174,462	1,123,157,888	91,901	410,188,192	-47.3	-63.5
Additions, alterations, and repairs	240,124	202,847,503	199,012	110,314,292	-17.1	-45.6
Grand total, all buildings	414,586	1,326,005,391	290,913	520,502,484	-29.8	-60.7

There was a decrease of 29.8 per cent in the number of building operations, comparing permits issued in 1932 with those issued in 1931. Indicated expenditures for total building operations decreased 60.7 per cent comparing these two years. Additions, alterations, and repairs decreased 17.1 per cent in number and 45.6 per cent in cost.

Comparing 1932 residential buildings with those of 1931, there was a decrease of 61.1 per cent in number and a decrease of 75.4 per cent in indicated expenditures. All classes of residential buildings showed decreases in indicated expenditures, and all, except lodging houses, showed decreases in number. Permits were issued for 2 more lodging houses in 1932 than in 1931. Decreases in expenditures in the resi-

dential group ranged from 60.6 per cent in the case of lodging houses to 94 per cent in the case of multifamily dwellings with stores.

Nonresidential buildings showed a decrease of 39.4 per cent in number and a decrease of 55.3 per cent in estimated cost. All types of nonresidential buildings, except sheds and stables and barns, showed decreases in number, and all, except "All other," showed decreases in indicated expenditures.

Families Provided for, 1931 and 1932

TABLE 3 shows the number and per cent of families provided for in each of the different kinds of dwellings for which permits were issued in 360 identical cities during the calendar years 1931 and 1932.

TABLE 3.—NUMBER AND PER CENT OF FAMILIES TO BE HOUSED IN NEW DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 360 IDENTICAL CITIES, 1931 AND 1932, BY KIND OF DWELLING

Kind of dwelling	Number of new buildings for which permits were issued		Families provided for			
			Number		Per cent	
	1931	1932	1931	1932	1931	1932
1-family dwellings	55,010	22,328	55,010	22,328	51.7	73.2
2-family dwellings	5,608	1,653	11,216	3,306	10.5	10.8
1-family and 2-family dwellings with stores combined	541	239	762	310	.7	1.0
Multifamily dwellings	2,177	432	37,120	4,416	34.9	14.5
Multifamily dwellings with stores combined	99	33	2,235	157	2.1	.5
Total	63,435	24,685	106,343	30,517	100.0	100.0

During 1932, provisions were made for 30,517 families in the new buildings for which permits were issued in the 360 cities. This is a decrease of over 70 per cent as compared with 1931. There was a marked decrease in the number of family dwelling units provided in each class of dwellings, comparing 1932 with 1931.

The percentage of families provided for in 1-family dwellings showed a marked increase, comparing 1932 with 1931. There was a slight increase in 2-family dwellings, but a large decrease in the percentage of families provided for in apartment houses comparing 1932 with the previous year.

Number of Buildings, by Cities

TABLE 4 shows, for the years 1931 and 1932, the number of new residential buildings, the number of new nonresidential buildings, the number of additions, alterations, and repairs, together with the number of families provided for, and the ratio of families provided for per 10,000 of population, in 360 identical cities.

During the year 1932, family dwelling units were provided for 30,517 families, or at the ratio of 6 families per each 10,000 of population. During 1931, family dwelling units were provided in these cities for 106,343 families, which was at the ratio of 21.3 families to each 10,000 of population.

All geographic divisions showed decreases in the number of families provided for. Decreases were also shown in all geographic divisions in the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations, comparing 1932 with 1931.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932

New England States

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Connecticut:											
Bridgeport	147,400	449	166	30.5	11.3	222	103	369	166	938	581
Bristol	30,200	50	12	17.0	4.0	42	12	152	74	372	237
Greenwich	35,500	104	49	30.1	13.8	99	44	148	82	477	298
Hartford	169,800	116	51	6.9	3.0	78	36	265	121	1,331	1,116
Meriden	39,300	45	35	11.6	8.9	44	32	125	131	532	499
New Britain	70,100	27	13	3.9	1.9	24	13	93	39	535	403
New Haven	162,700	166	73	10.2	4.5	144	65	303	218	1,003	749
New London	30,500	56	47	18.6	15.4	43	43	74	61	195	215
Norwalk	37,800	160	83	43.2	22.0	157	83	165	123	633	494
Stamford	48,800	108	22	22.6	4.5	87	15	151	92	456	319
Torrington	26,700	38	16	14.4	6.0	31	12	93	70	289	229
Waterbury	101,700	80	35	7.9	3.4	67	34	193	104	438	290
Maine:											
Bangor	29,400	62	29	21.3	—	61	28	100	61	183	139
Lewiston	35,600	39	23	11.0	6.5	29	23	31	20	79	55
Portland	71,100	93	59	13.1	8.3	90	58	237	155	1,117	922
Massachusetts:											
Beverly	25,600	73	26	28.7	10.2	70	25	133	118	336	286
Boston ¹	788,500	1,796	344	22.9	4.4	788	230	1,170	571	7,694	5,964
Brockton	363,797	76	25	11.9	3.9	73	24	211	153	614	482
Brookline	49,600	93	61	19.1	12.3	81	58	83	39	318	225
Cambridge	114,500	137	52	12.0	4.5	42	12	142	71	650	490
Chelsea	46,400	16	7	3.5	1.5	15	6	22	18	275	203
Chicopee	45,600	31	11	6.9	2.4	31	11	123	87	235	164
Everett	50,200	45	8	9.1	1.6	31	6	95	22	400	276
Fall River	115,274	9	7	.8	.6	8	8	198	146	537	428
Fitchburg	40,692	18	16	4.4	3.9	18	16	69	70	146	168
Haverhill	48,710	22	15	4.5	3.1	21	13	101	100	281	224
Holyoke	56,537	24	10	4.2	1.8	24	10	81	56	243	149
Lawrence	85,068	14	6	1.6	.7	10	6	130	46	350	180
Lowell	100,234	41	16	4.1	1.6	42	16	153	97	537	434
Lynn	103,000	122	23	11.9	2.2	96	21	231	167	802	626
Malden	60,000	147	32	24.9	5.3	95	29	131	54	495	328
Medford	64,300	315	67	50.6	10.4	234	62	227	90	608	303
New Bedford	112,597	14	5	1.2	.4	14	5	232	199	542	423
Newton	69,500	368	99	54.0	14.2	301	97	313	161	915	511
Pittsfield	51,400	157	50	31.0	9.7	150	49	266	133	675	350
Quincy	77,300	224	66	29.9	8.5	168	61	394	229	1,312	904
Revere	37,200	32	10	8.8	2.7	32	10	82	44	306	247
Salem	43,500	68	27	15.6	6.2	51	23	89	69	584	498
Somerville	106,300	51	3	4.8	.3	29	2	102	63	559	395
Springfield	154,400	192	78	12.6	5.1	170	74	375	228	827	569
Taunton	37,400	17	23	4.5	6.1	16	23	114	124	621	559
Waltham	41,100	84	38	20.8	9.2	72	31	147	80	350	231
Watertown	37,900	98	13	26.8	3.4	85	12	127	48	330	165
Worcester	198,700	225	133	11.4	6.7	218	127	343	227	1,304	950
New Hampshire:											
Concord	25,900	31	27	12.1	10.4	29	27	58	44	111	124
Manchester	176,834	68	68	8.9	8.9	66	62	200	181	1,045	996
Rhode Island:											
Central Falls	26,300	11	1	4.2	0.4	7	1	46	12	127	74
Cranston	45,900	227	89	50.9	19.4	223	85	379	241	769	461
East Providence	31,800	92	40	29.7	12.6	88	38	226	137	942	728
Newport	27,612	45	30	16.3	10.9	42	29	122	95	332	266
Pawtucket	80,000	75	37	9.5	4.6	74	31	211	105	525	256
Providence	256,400	282	108	11.1	4.2	215	81	720	394	4,729	4,004
Woonsocket	50,700	16	13	3.2	2.6	9	11	91	59	239	161
Total	4,483,355	6,949	2,397	15.6	5.3	4,965	2,053	10,436	6,295	40,243	30,348
Per cent of change			-65.5				-58.7		-39.7		-24.6

¹ Applications filed.² Census 1930.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

Middle Atlantic States

State and city	Popula-tion, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, includ-ing repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
New Jersey:											
Atlantic City	69,600	50	13	7.3	1.9	20	9	52	60	663	1,233
Bayonne	91,700	16	17	1.8	1.9	6	9	59	28	240	293
Belleville	29,500	100	17	35.2	5.8	85	17	136	76	325	179
Bloomfield	41,600	213	82	53.3	19.7	205	77	229	92	495	239
Camden	119,200	52	9	4.4	.8	37	7	133	85	609	301
Clifton	51,400	208	105	42.1	20.4	199	93	278	174	652	395
East Orange	71,800	46	25	6.6	3.5	28	16	173	83	644	353
Elizabeth	118,700	157	39	13.4	3.3	65	37	217	126	292	216
Garfield	32,000	43	23	13.9	7.2	20	16	62	59	158	134
Hoboken	59,261	40	6	6.7	1.0	1	1	8	9	289	227
Irvington	63,700	99	34	16.4	5.3	48	16	208	103	380	242
Jersey City	320,800	183	100	5.7	3.1	55	51	196	133	725	571
Kearny	43,800	67	15	15.8	3.4	40	9	109	63	227	148
Montclair	44,900	99	29	22.7	6.5	97	29	125	70	385	287
Newark	448,400	357	99	8.0	2.2	163	56	562	293	1,593	1,025
New Brunswick	34,900	16	3	4.6	.9	15	3	54	35	195	140
Orange	35,900	9	5	2.5	1.4	9	4	65	51	283	253
Passaic	162,959	12	16	1.9	2.5	9	16	84	51	629	569
Paterson	139,100	99	38	7.1	2.7	80	34	214	139	1,477	1,066
Perth Amboy	43,900	20	4	4.6	.9	14	4	87	51	197	118
Plainfield	35,900	92	30	26.1	8.4	92	30	150	85	450	251
Trenton	124,200	50	24	4.0	1.9	29	24	219	136	565	399
Union City	58,659	57	1	9.7	.2	5	1	45	18	534	389
West New York	38,700	14	1	3.7	.3	2	1	16	3	192	89
New York:											
Albany	130,500	217	94	16.8	7.2	174	94	175	132	1,229	1,172
Amsterdam	35,100	17	29	4.9	8.3	15	22	56	75	97	104
Auburn	36,800	28	18	7.6	4.9	26	17	140	111	276	201
Binghamton	78,800	90	42	11.6	5.3	65	40	378	363	2,590	2,654
Buffalo	587,600	1,029	174	17.7	3.0	447	108	1,647	778	3,568	2,240
Elmira	47,800	32	13	6.7	2.7	31	13	168	120	544	450
Jamestown	46,500	36	28	7.8	6.0	36	28	128	82	525	420
Kingston	28,400	52	22	18.4	7.7	49	22	147	123	547	396
Lockport	23,600	29	2	12.4	.8	27	2	139	14	289	36
Mount Vernon	65,600	303	32	47.5	4.9	127	29	93	75	516	293
Newburgh	31,500	18	10	5.7	3.2	18	10	64	48	161	148
New Rochelle	57,900	228	37	40.6	6.4	149	31	119	93	485	288
New York City:											
The Bronx ¹	1,382,300	8,537	994			1,211	522	610	311	7,183	5,956
Brooklyn ¹	2,679,500	10,837	1,615			1,889	587	3,243	1,585	11,396	8,350
Manhattan ¹	1,775,800	2,585	471	50.4	7.4	44	6	188	150	3,202	2,487
Queens ¹	1,213,000	12,716	2,035			6,038	1,217	6,225	2,746	18,899	12,049
Richmond ¹	167,500	1,061	232			540	209	744	546	2,217	1,592
Niagara Falls	80,300	164	41	21.0	5.1	131	36	289	235	1,305	1,013
Poughkeepsie	40,800	66	41	16.3	10.0	62	39	54	36	204	144
Rochester	335,000	166	78	5.0	2.3	170	78	977	677	2,291	1,785
Schenectady	96,500	90	40	9.4	4.1	86	36	298	164	1,050	754
Syracuse	216,100	260	81	12.2	3.7	240	79	484	235	1,268	657
Troy	72,900	121	81	16.6	11.1	119	73	138	120	556	451
Utica	102,800	82	49	8.0	4.8	81	49	128	91	326	207
Watertown	32,400	22	19	6.8	5.9	22	19	112	86	495	404
White Plains	39,100	276	45	73.4	11.5	127	45	90	56	350	241
Yonkers	142,200	1,021	242	73.6	17.0	544	185	381	317	1,265	810
Pennsylvania:											
Allentown	98,600	45	16	4.6	1.6	44	16	194	123	428	329
Altoona	83,000	35	14	4.2	1.7	35	13	405	311	1,016	634
Bethlehem	58,700	35	21	6.0	3.6	35	21	79	51	177	113
Butler	23,568	4	1	1.7	.4	4	1	18	19	53	76
Chester	59,400	19	0	3.2	0	16	0	97	32	146	61
Easton	34,600	6	19	1.7	5.5	6	8	63	53	217	191
Erie	119,200	221	75	18.8	6.3	212	73	483	282	1,220	685
Harrisburg	81,000	55	29	6.8	3.6	53	27	147	114	482	350
Hazleton	37,800	22	34	5.9	9.0	17	27	74	83	166	171
Johnstown	66,993	16	7	2.4	1.0	16	7	121	85	327	214
Lancaster	61,400	28	11	4.6	1.8	28	11	133	57	410	202
Lebanon	26,000	29	5	11.2	1.9	26	5	45	13	107	28

¹ Applications filed.² Census 1930.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

Middle Atlantic States—Continued

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Pennsylvania—Con.											
McKeesport	56,400	54	7	9.7	1.2	50	7	116	78	815	404
Nanticoke	26,800	45	33	17.0	12.3	35	29	1	7	131	52
New Castle	49,500	30	10	6.1	2.0	30	10	166	103	284	162
Norristown	36,600	36	2	9.9	.5	28	2	125	70	420	237
Philadelphia	1,978,900	1,028	534	5.2	2.7	881	520	1,026	665	5,491	4,144
Pittsburgh	680,900	919	197	13.6	2.9	688	189	883	450	4,059	2,401
Reading	111,900	49	30	4.4	2.7	49	30	163	60	1,543	843
Scranton	144,700	63	55	4.4	3.8	55	49	270	246	744	652
Wilkes-Barre	87,200	37	39	4.3	4.5	19	30	166	116	696	601
Wilkinsburg	30,800	31	9	10.3	2.9	24	7	66	19	266	86
Williamsport	46,900	20	12	4.3	2.6	20	11	302	181	1,347	1,531
York	57,000	45	18	8.0	3.2	45	18	183	103	891	674
Total	15,784,740	45,054	8,478	28.9	5.4	16,208	5,267	26,022	14,713	96,469	69,260
Per cent of change			-81.2				-67.5		-43.5		-28.2

East North Central States

Illinois:											
Alton	31,400	22	10	7.1	3.2	23	10	38	28	263	160
Aurora	47,600	35	13	7.4	2.7	35	13	154	74	476	216
Belleville	29,200	81	45	28.0	15.4	80	45	49	18	165	82
Berwin	54,200	47	6	9.2	1.1	40	5	142	79	238	121
Bloomington	31,400	26	10	8.3	3.2	26	10	25	15	61	34
Chicago	3,523,400	966	221	2.8	.6	747	197	2,107	1,141	6,619	3,872
Cicero	71,300	23	3	3.3	.4	20	2	68	46	142	93
Danville	37,400	18	24	4.9	6.4	18	16	29	24	135	103
Decatur	59,500	45	8	7.7	1.3	38	8	158	109	252	158
East St. Louis	76,000	140	44	18.6	5.8	129	44	203	116	468	321
Elgin	37,300	44	17	12.0	4.6	44	17	114	66	460	276
Evanston	69,100	36	13	5.4	1.9	35	15	114	54	354	224
Granite City	27,000	4	0	1.5	0	4	0	7	2	14	3
Joliet	44,700	50	5	11.2	1.1	42	5	54	13	332	118
Maywood	28,800	37	3	13.5	1.0	10	3	74	24	178	76
Moline	32,600	61	15	18.8	4.6	61	15	110	104	615	450
Oak Park	69,300	27	13	4.0	1.9	25	11	111	32	240	119
Peoria	111,200	259	84	23.9	7.6	236	84	310	223	807	497
Quincy	39,300	24	10	6.1	2.5	24	10	102	89	169	153
Rockford	90,100	73	10	8.3	1.1	62	10	140	52	583	249
Rock Island	38,600	52	20	13.6	5.2	52	20	127	62	637	507
Springfield	74,300	156	53	21.3	7.1	134	53	265	168	850	602
Waukegan	36,400	62	15	17.7	4.1	61	15	69	25	237	80
Indiana:											
Anderson	41,400	43	18	10.6	4.3	46	18	86	55	676	133
East Chicago	58,900	3	2	.5	.3	2	1	77	25	215	58
Elkhart	33,800	16	12	4.8	3.6	16	12	123	66	460	249
Evansville	106,000	97	20	9.3	1.9	97	19	310	271	1,055	814
Ft. Wayne	121,300	155	23	13.1	1.9	155	23	423	190	1,311	595
Gary	110,200	56	8	5.3	.7	51	8	118	42	340	80
Hammond	70,400	40	12	5.9	1.7	39	11	181	105	345	190
Indianapolis	374,400	399	128	10.8	3.4	352	115	978	554	3,229	2,160
Kokomo	33,300	4	1	1.2	.3	4	1	106	62	240	135
Lafayette	27,000	35	17	13.1	6.3	26	15	10	3	55	29
Marion	24,700	12	10	4.9	4.0	12	10	64	35	326	162
Michigan City	28,200	24	12	8.7	4.3	23	12	79	55	164	102
Mishawaka	31,500	12	3	4.0	1.0	12	3	77	51	146	91
Muncie	47,400	34	11	7.2	2.3	34	11	209	136	941	524
Richmond	33,400	25	5	7.6	1.5	25	5	49	28	239	147
South Bend	111,200	54	18	5.0	1.6	54	17	398	235	1,074	665
Terre Haute	162,810	18	11	2.9	1.8	18	11	178	130	675	507
Michigan:											
Ann Arbor	28,600	68	32	24.5	11.2	65	29	107	84	546	419
Battle Creek	44,900	27	14	6.1	3.1	27	14	206	155	373	306
Bay City	47,355	57	29	12.0	6.1	57	29	183	113	817	480
Dearborn	60,900	279	38	49.6	6.2	178	37	207	117	578	323
Detroit	1,720,700	2,135	310	12.9	1.8	1,873	301	4,136	1,814	10,082	5,150

² Census 1930.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

East North Central States—Continued

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Michigan—Contd.											
Flint	170,200	128	12	7.8	0.7	126	12	547	228	2,103	992
Grand Rapids	174,200	113	27	6.6	1.5	106	26	579	370	1,664	1,002
Hamtramck	57,900	2	0	.3	.0	2	0	44	17	228	118
Highland Park	54,400	1	1	.2	.2	1	1	43	37	142	132
Jackson	56,600	17	2	3.0	.4	17	2	201	110	506	280
Kalamazoo	55,800	65	19	11.7	3.4	63	18	162	106	742	493
Lansing	82,700	43	7	5.3	.8	43	7	222	146	470	329
Muskegon	48,400	28	7	5.8	1.4	28	7	123	52	359	164
Pontiac	70,100	6	6	.9	.9	3	3	265	114	444	193
Port Huron	32,500	47	7	14.7	2.2	47	7	24	17	95	41
Saginaw	84,000	58	23	7.0	2.7	56	22	303	178	825	542
Wyandotte	30,700	51	13	17.2	4.2	47	13	152	64	317	163
Ohio:											
Akron	266,300	105	53	4.0	2.0	101	53	803	480	1,506	908
Ashtabula	23,400	17	4	7.3	1.7	15	4	93	38	232	104
Canton	108,200	21	8	2.0	.7	18	8	287	133	627	319
Cincinnati	462,200	1,235	431	27.0	9.3	885	371	1,148	717	5,395	3,861
Cleveland	923,200	511	220	5.6	2.4	440	177	1,857	898	6,645	3,612
Cleveland and											
Heights	58,800	185	47	33.5	8.0	150	47	208	90	451	223
Columbus	209,600	300	50	10.1	1.7	219	49	800	498	1,738	1,074
Dayton	207,800	173	54	8.5	2.6	151	54	567	305	1,396	744
East Cleveland	42,400	1	2	.2	.5	1	2	46	37	139	102
Elyria	26,700	16	9	6.1	3.4	16	9	97	48	200	134
Hamilton	54,800	23	15	4.3	2.7	23	15	139	145	325	361
Lakewood	76,800	88	97	11.9	12.6	31	19	211	138	391	311
Lima	42,500	3	1	.7	.2	3	1	73	54	237	124
Lorain	46,100	30	2	6.6	.4	30	2	108	49	216	87
Mansfield	34,500	81	20	23.8	5.8	81	20	146	70	372	191
Marion	31,800	1	3	.3	.9	1	3	57	37	112	62
Massillon	26,800	6	3	2.3	1.1	6	3	58	42	170	97
Middletown	31,200	3	1	1.0	.3	3	1	63	37	189	158
Newark	30,800	20	12	6.5	3.9	20	12	59	35	94	70
Norwood	35,300	36	5	10.5	1.4	27	5	73	37	170	101
Portsmouth	44,200	2	3	.5	.7	2	3	64	39	149	87
Springfield	70,500	40	18	5.7	2.6	40	18	181	94	428	231
Steubenville	36,700	28	5	7.8	1.4	26	5	42	23	134	70
Toledo	300,900	135	44	4.5	1.5	128	43	853	404	1,822	898
Warren	44,100	30	2	7.0	.5	30	2	142	89	603	303
Youngstown	175,300	84	17	4.9	1.0	81	17	331	201	768	473
Zanesville	36,800	20	8	5.4	2.2	20	8	38	10	90	32
Wisconsin:											
Appleton ²	26,500	85	60	32.7	22.6	85	60	203	134	443	312
Eau Claire	27,500	71	61	26.4	22.2	70	61	113	86	283	251
Fond du Lac	27,100	42	20	15.7	7.4	42	20	105	77	273	159
Green Bay	40,400	141	57	35.4	14.1	101	56	190	154	515	344
Kenosha	52,100	20	6	3.9	1.2	20	5	134	78	387	201
Madison	62,500	135	70	22.5	11.2	119	66	209	102	685	398
Milwaukee	603,500	929	169	15.7	2.8	560	142	1,412	610	3,892	2,165
Oshkosh	41,600	52	22	12.7	5.3	52	22	138	68	346	207
Racine	69,100	47	8	6.9	1.2	41	8	146	55	333	134
Sheboygan	41,000	76	21	18.9	5.1	69	21	145	102	777	591
Superior	236,113	23	17	6.4	4.7	23	13	150	79	313	214
West Allis	39,300	88	9	23.7	2.3	65	9	188	66	387	148
Total	13,400,378	11,343	3,154	8.6	2.4	9,446	2,862	27,217	14,688	79,310	40,170
Per cent of change			-72.2				-69.7		-46.0		-41.8

West North Central States

Iowa:											
Burlington	27,300	21	.5	7.7	1.8	21	5	70	46	154	81
Cedar Rapids	57,600	139	58	24.4	10.1	134	55	422	313	1,177	1,004
Council Bluffs	43,500	41	20	9.6	4.6	41	20	70	57	208	182
Davenport	61,400	128	49	20.9	8.0	116	47	289	205	1,493	1,157

² Census 1930.³ For 11 months only; data not received for December, 1932.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

West North Central States—Continued

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Iowa—Continued.											
Des Moines	146,100	323	143	22.4	9.8	245	137	619	519	1,171	953
Dubuque	42,200	56	33	13.3	5.5	50	23	112	73	528	352
Ottumwa	29,100	61	23	21.3	7.9	61	21	42	46	188	143
Sioux City	80,900	222	76	27.7	9.4	178	76	356	175	668	328
Waterloo	48,400	111	27	23.4	5.6	112	27	257	147	534	284
Kansas:											
Hutchinson	27,900	62	29	22.5	10.4	61	27	94	64	300	236
Kansas City	123,800	127	52	10.3	4.2	124	52	215	156	596	358
Topeka	66,100	81	49	12.4	7.4	75	44	319	244	591	435
Wichita	119,500	304	58	26.3	4.9	258	54	330	216	1,132	652
Minnesota:											
Duluth	102,000	95	60	9.3	5.9	95	58	354	251	1,472	919
Minneapolis	481,700	1,265	445	26.7	9.2	1,063	416	1,849	1,294	5,861	3,889
St. Paul	279,700	397	229	14.4	8.2	363	225	1,440	889	3,950	2,813
Missouri:											
Joplin	33,700	28	6	8.3	1.8	21	5	50	43	236	156
Kansas City	416,300	423	159	10.3	3.8	395	159	624	295	1,396	708
St. Joseph	81,600	49	26	6.0	3.2	49	26	183	111	453	274
St. Louis	832,700	1,491	553	18.0	6.6	1,114	503	2,401	1,429	6,754	4,387
Springfield	60,100	94	56	16.0	9.3	94	56	98	94	347	329
Nebraska:											
Lincoln	82,700	114	61	14.0	7.4	113	54	325	191	627	304
Omaha	218,900	334	181	15.4	8.3	298	177	440	360	1,017	740
North Dakota:											
Fargo	30,000	92	31	31.3	10.3	77	31	49	48	212	148
South Dakota:											
Sioux Falls	35,200	232	97	67.4	27.6	210	97	120	39	405	164
Total	3,528,400	6,290	2,516	18.0	7.1	5,368	2,397	11,128	7,305	31,479	21,086
Per cent of change			—60.0				—55.3		—34.4		—33.0

South Atlantic States

Delaware:											
Wilmington	106,597	217	74	20.4	6.9	190	72	361	115	1,055	559
District of Columbia:											
Washington	493,000	3,606	1,192	73.4	24.2	1,566	980	1,570	1,002	5,819	4,492
Florida:											
Jacksonville	139,900	160	125	12.1	8.9	155	124	388	359	2,288	2,331
Miami	108,900	167	100	14.8	9.2	167	100	482	367	2,970	2,354
Orlando	30,600	28	12	9.6	3.9	26	11	71	22	576	358
St. Petersburg	43,100	67	27	16.0	6.3	66	27	139	141	654	633
Tampa	108,000	65	46	6.2	4.3	66	46	350	272	2,642	2,065
Georgia:											
Atlanta	283,500	423	209	15.2	7.4	322	183	765	480	3,239	2,393
Augusta	62,100	77	38	12.6	6.1	77	38	99	20	964	624
Columbus	43,600	36	22	8.3	5.0	36	22	45	42	420	303
Macon	54,000	41	14	7.6	2.6	41	14	39	18	501	420
Savannah	285,024	94	22	11.1	2.6	88	22	58	58	276	181
Maryland:											
Baltimore	820,500	1,953	450	24.0	5.5	1,648	373	2,284	890	15,680	12,364
Cumberland	39,500	24	13	6.2	3.3	23	12	68	59	145	115
Hagerstown	31,500	33	9	10.6	2.9	28	9	103	89	171	127
North Carolina:											
Asheville	53,100	18	3	3.5	.6	15	3	62	65	267	201
Charlotte	84,900	203	65	24.2	7.7	133	64	106	61	641	397
Durham	56,900	71	59	13.0	10.4	71	50	28	12	191	152
Greensboro	56,800	32	24	5.8	4.2	32	22	105	68	511	393
High Point	41,400	184	31	46.8	7.5	176	24	129	40	354	80
Raleigh	39,600	34	26	8.8	6.6	34	26	95	78	212	150
Wilmington	32,270	42	11	13.0	3.4	42	11	57	34	320	161
Winston-Salem	79,500	53	26	6.8	3.3	43	24	168	115	1,027	584
South Carolina:											
Charleston	262,265	49	35	7.9	5.6	49	34	37	39	400	466
Columbia	53,200	177	74	33.7	13.9	126	62	107	84	559	505
Greenville	30,500	72	21	24.1	6.9	66	21	50	26	326	274
Spartanburg	30,100	16	3	5.4	1.0	14	3	37	18	202	109

* Census 1930.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

South Atlantic States—Continued

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Virginia:											
Lynchburg	42,000	101	95	24.4	22.6	81	94	71	64	300	348
Newport News	34,417	61	36	17.7	10.5	58	36	276	216	1,494	1,378
Norfolk	129,710	262	218	20.2	16.8	212	209	468	371	1,142	966
Petersburg	28,564	18	6	6.3	2.1	16	6	19	34	85	80
Portsmouth	45,704	45	31	9.8	6.8	43	31	94	61	389	259
Richmond	185,400	191	111	10.4	6.0	178	97	497	328	1,543	1,119
Roanoke	72,700	67	34	9.4	4.7	61	31	146	90	422	293
West Virginia:											
Charleston	64,600	109	54	17.4	8.4	86	39	102	98	325	381
Clarksburg	29,100	36	14	12.4	4.8	24	14	87	58	219	167
Huntington	80,500	30	21	3.8	2.6	28	21	139	115	236	237
Parkersburg	30,900	16	8	5.3	2.6	16	8	109	53	267	148
Wheeling	62,900	44	30	7.1	4.8	32	29	135	55	421	271
Total	3,876,851	8,922	3,389	23.3	8.7	6,135	2,992	9,946	6,117	40,352	38,528
Per cent of change			—62.0				—51.2		—38.5		—21.9

South Central States

Alabama:											
Birmingham	277,100	94	40	3.5	1.4	91	37	313	184	1,716	1,240
Mobile	70,700	102	65	14.8	9.2	100	62	48	25	443	343
Montgomery	68,300	240	82	35.7	12.0	208	79	114	46	1,194	829
Arkansas:											
Little Rock	85,300	84	21	10.0	2.5	77	19	169	115	848	742
Kentucky:											
Ashland	31,400	5	2	1.7	.6	5	2	49	16	101	58
Covington	67,000	39	5	5.9	.7	34	5	126	62	347	212
Lexington	46,200	56	41	12.2	8.9	56	19	136	111	689	764
Louisville	308,700	156	78	5.1	2.5	141	77	526	404	1,174	898
Newport	29,744	3	2	1.0	.7	3	2	27	16	63	42
Paducah	35,500	32	6	9.2	1.7	32	6	30	13	75	34
Louisiana:											
Baton Rouge	32,200	108	59	34.2	18.3	94	41	176	93	842	785
Monroe	31,600	58	20	19.9	6.3	50	19	43	21	146	117
New Orleans	474,500	349	225	7.5	4.7	313	211	214	131	1,323	1,047
Shreveport	78,700	143	96	18.4	12.2	137	93	177	91	1,687	1,332
Mississippi:											
Jackson	53,600	136	48	26.6	9.0	112	48	67	11	920	1,002
Oklahoma:											
Enid	28,600	62	5	22.5	1.7	48	5	25	27	171	134
Muskogee	32,400	18	6	5.6	1.9	18	6	43	35	86	70
Oklahoma City	206,000	879	107	44.7	5.2	624	101	606	341	1,796	859
Okmulgee	17,097	0	0	0	0	0	0	8	7	17	12
Tulsa	149,600	377	46	25.9	3.1	352	45	360	242	1,501	714
Tennessee:											
Chattanooga	124,400	123	38	10.1	3.1	116	35	78	26	2,349	1,622
Johnson City	27,800	20	22	7.5	7.9	20	19	26	17	63	46
Knoxville	111,900	90	68	8.2	6.1	88	66	240	118	526	316
Memphis	263,500	227	103	8.8	3.9	205	92	686	346	2,717	2,059
Nashville	156,900	279	153	17.9	9.8	242	142	193	173	1,580	1,273
Texas:											
Amarillo	40,600	189	57	30.9	11.5	167	53	178	76	501	248
Austin	62,300	573	274	98.5	44.0	500	244	470	364	1,435	1,104
Beaumont	61,500	91	19	15.2	3.1	90	18	129	76	1,046	772
Dallas	282,400	947	361	34.7	12.8	694	282	486	441	3,071	2,409
El Paso	107,000	184	36	17.5	3.4	158	34	166	152	697	419
Fort Worth	170,700	495	245	29.6	14.4	434	216	472	333	1,923	1,325
Galveston	54,800	145	120	26.9	21.9	139	120	188	261	1,371	1,454
Houston	324,600	1,793	501	57.8	15.4	1,445	461	458	297	2,261	963
Port Arthur	57,200	50	5	9.2	.9	50	5	113	64	626	398
San Angelo	28,700	39	13	14.4	4.5	39	13	54	17	182	101
San Antonio	246,900	668	289	27.8	11.7	531	272	410	366	2,586	2,023
Waco	56,200	88	81	16.1	14.4	80	76	52	79	312	319
Wichita Falls	44,500	6	6	1.4	1.3	6	6	21	23	132	173
Total	4,355,141	8,948	3,345	21.1	7.7	7,499	3,031	7,677	5,220	38,517	28,258
Per cent of change			—62.6				—59.6		—32.0		—26.6

* Census 1930.

TABLE 4.—NUMBER OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES IN 1931 AND 1932—Continued

Mountain and Pacific States

State and city	Population, 1932	Families provided for				Number of buildings for which permits were issued					
		Number		Per 10,000 population		New residential		New nonresidential		Total, including repairs	
		1931	1932	1931	1932	1931	1932	1931	1932	1931	1932
Arizona:											
Phoenix	51,700	222	48	44.3	9.3	154	48	85	56	488	314
Tucson	34,700	186	53	55.2	15.3	158	49	222	133	872	723
California:											
Alameda	36,400	62	26	17.3	7.1	51	26	135	88	633	483
Alhambra	33,900	279	86	87.2	25.4	240	84	89	72	530	338
Bakersfield	27,000	77	19	28.9	7.0	73	18	117	60	491	356
Berkeley	87,600	216	104	25.4	11.9	186	101	213	152	1,143	940
Fresno	52,600	132	53	25.1	10.1	132	50	179	140	1,437	1,088
Glendale	75,000	550	177	79.3	23.6	491	165	359	284	1,201	688
Long Beach	161,000	995	308	65.3	19.1	591	230	625	382	3,304	2,449
Los Angeles	1,385,000	6,600	2,703	50.1	19.5	4,356	2,106	6,582	4,235	25,311	17,122
Oakland	298,900	777	266	26.6	8.9	609	257	682	503	2,734	2,023
Pasadena	82,600	195	93	24.5	11.3	157	81	325	241	3,285	2,978
Riverside	32,000	71	36	22.9	11.3	65	36	137	119	709	658
Sacramento	99,900	313	109	32.2	10.9	300	105	265	205	1,377	1,373
San Bernardino	41,600	132	36	33.2	8.7	126	36	104	54	424	255
San Diego	163,300	627	305	40.1	18.7	550	280	718	506	2,831	2,067
San Francisco	662,400	2,441	1,073	37.6	16.2	1,804	831	365	326	5,251	3,931
San Jose	61,500	200	64	33.4	10.4	173	60	222	169	811	583
Santa Ana	33,500	96	30	29.9	9.0	83	31	59	26	524	393
Santa Barbara	36,700	200	67	56.7	18.3	185	65	202	127	1,305	549
Santa Monica	42,000	257	143	64.6	34.0	193	114	209	143	576	511
Stockton	49,500	146	60	29.9	12.1	136	52	269	158	755	555
Vallejo	14,476	32	58	22.1	40.1	32	49	57	68	373	408
Colorado:											
Colorado Springs	33,900	43	32	12.8	9.4	43	32	169	146	471	420
Denver	294,700	994	319	34.1	10.8	552	312	1,077	1,262	4,183	3,523
Pueblo	51,600	45	16	8.8	3.1	43	15	244	128	736	424
Montana:											
Butte	39,532	1	0	.3	0	1	0	97	46	197	106
Great Falls	29,900	93	25	31.6	8.4	90	25	139	40	390	169
New Mexico:											
Albuquerque	27,500	165	52	60.9	18.9	160	52	130	96	665	582
Oregon:											
Portland	311,100	539	200	17.6	6.4	448	195	1,361	869	4,823	3,435
Salem	28,100	60	36	15.6	12.8	52	36	127	85	589	708
Utah:											
Ogden	41,900	47	17	11.4	4.1	47	16	29	37	134	126
Salt Lake City	145,300	442	52	30.9	3.6	205	44	341	179	968	518
Washington:											
Bellingham	32,000	43	35	13.7	10.9	43	28	35	24	335	199
Everett	31,200	19	6	6.1	1.9	18	6	138	75	611	457
Seattle	376,500	1,139	361	30.6	9.6	1,010	314	1,388	965	5,714	3,677
Spokane	117,000	216	92	18.6	7.9	216	92	649	460	1,757	1,334
Tacoma	108,500	185	78	17.2	7.2	162	78	336	183	1,278	800
Total	5,232,008	18,837	7,238	37.1	13.8	13,935	6,119	18,480	12,842	79,216	57,263
Per cent of change			—61.6				—56.1		—30.5		—27.7
Total 300 cities	50,660,873	106,343	30,517	21.3	6.0	63,556	24,721	110,906	67,180	414,586	290,913
Per cent of change			—71.3				—61.1		—39.4		—29.8

Hawaii

Honolulu	149,500	864	720	59.9	48.2	836	718	595	528	2,379	2,199
Per cent of change			—16.7				—14.1		—11.3		—7.6

² Census 1930.

Building Operations, 1921 to 1932

TABLE 5 shows for 257 identical cities the estimated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations; the estimated population of each year 1921 to 1932; the number of families provided for; the ratio of families provided for to each 10,000 of population; and the index number of families provided for weighted by population. Comparable figures are available back to 1921 for these 257 cities only.

TABLE 5.—ESTIMATED EXPENDITURES FOR EACH CLASS OF NEW BUILDINGS, ADDITIONS, ALTERATIONS, AND REPAIRS, FAMILIES PROVIDED FOR AND RATIO TO POPULATION, AND INDEX NUMBERS THEREOF IN 257 IDENTICAL CITIES, 1921 TO 1932

Year	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total building operations	
	Estimated expenditures	Index number	Estimated expenditures	Index number	Estimated expenditures	Index number	Estimated expenditures	Index number
1921	\$937,352,739	100.0	\$635,775,199	100.0	\$282,651,791	100.0	\$1,855,779,729	100.0
1922	1,612,352,921	172.0	876,276,713	137.8	297,310,776	105.2	2,785,940,410	150.1
1923	2,000,986,900	213.5	1,070,596,718	168.4	359,678,980	127.3	3,431,262,598	184.9
1924	2,070,276,772	220.9	1,137,631,080	178.9	300,358,735	106.3	3,508,266,587	189.0
1925	2,461,546,270	262.6	1,343,880,884	211.4	232,635,185	82.3	4,038,062,339	217.6
1926	2,255,994,627	240.7	1,300,840,876	204.6	270,091,701	95.6	3,826,927,204	206.2
1927	1,906,003,260	203.3	1,231,785,870	193.7	340,815,932	120.6	4,478,605,062	187.4
1928	1,859,429,751	198.4	1,135,549,986	178.6	309,719,975	109.6	3,304,699,712	178.1
1929	1,433,111,774	152.9	1,146,958,101	180.4	353,047,656	124.9	2,933,117,531	158.1
1930	601,269,847	64.1	849,386,873	133.6	249,018,794	88.1	1,699,675,514	91.6
1931	426,270,111	45.5	622,830,444	98.0	188,884,738	66.8	1,237,985,293	66.7
1932	103,452,079	11.0	275,788,958	43.4	102,249,230	36.2	481,490,267	25.9

Year	Population		Families provided for			
	As estimated by Census Bureau	Index number	Number	Index number	Ratio to each 10,000 of population	Index number adjusted to population
1921	36,575,118	100.0	224,545	100.0	61.4	100.0
1922	37,511,516	102.6	377,305	168.0	100.6	163.7
1923	38,447,913	105.1	453,673	202.0	118.0	192.2
1924	39,384,311	107.7	442,919	197.3	112.5	183.2
1925	40,320,708	110.2	491,222	218.8	121.8	198.4
1926	41,257,106	112.8	462,214	205.8	112.0	182.4
1927	42,058,897	115.0	406,095	180.9	96.6	157.3
1928	42,767,125	116.9	388,678	173.1	90.9	148.1
1929	43,665,235	119.4	244,394	108.8	56.0	91.1
1930	44,850,467	122.6	125,322	55.8	27.9	45.5
1931	45,896,339	125.5	98,178	43.7	21.4	34.8
1932	46,647,939	127.5	27,381	12.2	5.9	9.6

¹ Actual enumeration.

During 1932, permits were issued for building operations in these 257 cities to cost \$481,490,267. This is only 25.9 per cent of the estimated expenditures for building operations for which permits were issued in the year 1921. From 1921 to 1925, there was an increase in indicated expenditures for total building operations in each year. During the peak year 1925, the index number stood at 217.6. There has been a decrease each year since 1925.

Residential buildings increased each year from 1921 to 1925, and decreased each year from that year to 1932, the 1932 index number

standing at 11.0. New nonresidential buildings reached a peak of 211.4 in 1925 and has decreased until the index number stands at 43.4 in 1932. The index number of additions, alterations, and repairs reached a peak of 127.3 in 1923. The index number for 1932 is 36.2.

In comparing the above figures through the 12-year period it should be kept in mind that there have been decided changes in the cost of building construction. The change in the wholesale price of building as compiled by the Bureau of Labor Statistics and recomputed on a 1921 base is shown by the index numbers on page 852. The bureau also has information as to the change in the wage rates of organized building-trade workers but no similar figures for unorganized workers. Index numbers showing the change for the organized building mechanics are given on page 852. Because of incomplete figures for the labor cost of building no attempt is made to give an index for the change in the total cost of building construction.

The index number of families provided for climbed each year to the peak 218.8 in 1925, and then declined steadily so that the index number for 1932 fell to 12.2. In 1921, 61.4 families were provided for to each 10,000 of population; in 1925, the peak year, 121.8 family-dwelling units were provided to each 10,000 of population. The index number of families provided for adjusted to population was 9.6 for the year 1932.

Average Cost of Buildings per Family, 1921 to 1932

TABLE 6 shows for each year, 1921 to 1932, the average cost per family-dwelling unit of each type of housing accommodation for which permits were issued in the 257 identical cities from which reports were received.

TABLE 6.—AVERAGE COST OF NEW DWELLINGS¹ PER FAMILY IN 257 IDENTICAL CITIES, 1921 TO 1932

[This table does not attempt to show the change in the cost of erecting an identical building, but it does show the change in the cost of such building as was erected]

Year	Average cost of new dwellings per family				Index numbers of cost of dwellings per family			
	1-family dwellings	2-family dwellings ²	Multi-family dwellings ³	All classes of dwellings	1-family dwellings	2-family dwellings ²	Multi-family dwellings ³	All classes of dwellings
1921	\$3,972	\$3,762	\$4,019	\$3,947	100.0	100.0	100.0	100.0
1922	4,134	3,801	3,880	4,005	104.1	101.0	96.5	101.5
1923	4,203	4,159	4,001	4,127	105.8	110.6	99.6	104.6
1924	4,317	4,336	4,418	4,352	108.7	115.3	109.9	110.3
1925	4,618	4,421	4,289	4,464	116.3	117.5	106.7	113.1
1926	4,725	4,480	4,095	4,422	119.0	119.1	101.9	112.0
1927	4,830	4,368	4,170	4,449	121.6	116.1	103.8	112.7
1928	4,937	4,064	4,129	4,407	124.3	108.0	102.7	111.7
1929	4,915	4,020	4,402	4,566	123.7	106.9	109.5	115.7
1930	4,993	3,924	3,857	4,385	125.7	104.3	96.0	111.1
1931	4,834	3,807	3,644	4,225	121.7	95.9	90.7	107.0
1932	3,943	3,250	3,011	3,705	99.3	86.4	74.9	93.9

¹ Includes only cost of the buildings.

² Includes 1-family and 2-family dwellings with stores.

³ Includes multifamily dwellings with stores.

In 1921 the average cost of all 1-family dwellings for which permits were issued in these 257 cities was \$3,972. There was an increase each year in this cost, including the year 1928; a slight drop in 1929;

another rise in 1930, when the peak expenditure of \$4,993 was reached. In 1931 the average expenditure dropped over \$100, and, in the year 1932, there was a drop of nearly \$900 in the average cost of the 1-family dwellings for which permits were issued in these cities, the 1932 price for 1-family dwellings being \$3,943. It must not be assumed that dwellings of the same type were erected each year, as explained above.

The average cost per family of 2-family dwellings in 1921 was \$3,762. By 1926, the average per family cost of this type of dwelling had reached \$4,480. There has been a decrease each year since, the average expenditure for 2-family dwellings in 1932 being \$3,250 per family.

The multifamily dwellings erected in 1921 averaged \$4,019 per dwelling unit. The highest price reached per dwelling unit occurred in 1924. During that year, apartment houses for which permits were issued cost \$4,418 per family. The average price fluctuated considerably in the succeeding years with the trend mostly downward. The year 1932 showed the lowest price of any of the 12 years under discussion, the average price per family dwelling unit of apartment houses for which permits were issued during that year being \$3,011.

The average cost per family of all classes of dwellings for which permits were issued during 1932 was \$3,705, compared with \$3,947 in 1921. This is a decrease of 6.1 per cent. In 1925, the peak year, the average cost of all classes of dwellings was \$4,464 per family dwelling unit.

Families Provided for, 1921 to 1932

TABLE 7 shows the number and percentage distribution of families provided for in the different kinds of dwellings in 257 identical cities from which reports were received each year since 1921.

TABLE 7.—NUMBER AND PER CENT OF FAMILIES PROVIDED FOR IN DIFFERENT KINDS OF DWELLINGS IN 257 IDENTICAL CITIES, 1921 TO 1932

Year	Number of families provided for in—				Per cent of families provided for in—		
	1-family dwellings	2-family dwellings ¹	Multi-family dwellings ²	All classes of dwellings	1-family dwellings	2-family dwellings ¹	Multi-family dwellings ²
1921	130,873	38,858	54,814	224,545	58.3	17.3	24.4
1922	179,364	80,252	117,689	377,305	47.5	21.3	31.2
1923	207,632	96,344	149,697	453,673	45.8	21.2	33.0
1924	210,818	95,019	137,082	442,919	47.6	21.5	30.9
1925	226,159	86,145	178,918	491,222	46.0	17.5	36.4
1926	188,074	64,298	209,842	462,214	40.7	13.9	45.4
1927	155,512	54,320	196,263	406,095	38.3	13.4	48.3
1928	136,907	43,098	208,673	388,678	35.2	11.1	53.7
1929	98,104	27,813	118,417	244,394	40.2	11.4	48.5
1930	57,318	15,145	52,859	125,322	45.7	12.1	42.2
1931	48,330	11,310	38,538	98,178	49.2	11.5	39.3
1932	19,528	3,400	4,453	27,381	71.3	12.4	16.3

¹ Includes 1-family and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

During the calendar year 1932, living quarters were provided for 27,381 families in the 257 cities. Of these families, 71.3 per cent were provided for in 1-family dwellings, 12.4 per cent in 2-family dwellings, and 16.3 per cent in apartments.

One-family dwellings accounted for a larger percentage of the total number of family dwelling units during 1932 than during any of the other years for which data has been collected by the Bureau of Labor Statistics. This is the first year since 1921 that more than one-half of the total family dwelling units provided have been in 1-family dwellings. During 1928, only 35.2 per cent of the total family dwelling units erected were provided in 1-family dwellings. In contrast, the percentage of family dwelling units provided in apartment houses was much lower than for any of the other years covered by the bureau's studies. In 1921, 24.4 per cent of the family dwelling units provided were in apartment houses. This percentage rose each year until 1928, when 53.7 per cent of all families provided for were to live in apartment houses. There has been a drop in this percentage until 1932, when only 16.3 per cent of the family dwelling units provided were in apartment houses.

Table 8 shows the percentage of families provided for by the different types of dwellings in the years 1921 to 1932, inclusive, in 257 identical cities, by population groups.

During the year 1932, in each population group, more families were provided for in 1-family dwellings than in both 2-family dwellings and apartment houses. Of the 14 cities having a population of 500,000 or over, 58.2 per cent of all families provided for during 1932 were accommodated in 1-family dwellings. The highest previous percentage of families provided for in any one year in 1-family dwellings was in 1921, when 44.2 per cent of the number of families accommodated during that year were to be housed in this type of dwelling. During 1928, only 22.1 per cent of the families provided for were housed in 1-family dwellings, and 67.2 per cent were housed in apartment houses, in these cities.

The percentage of families provided for in apartment houses was lower during 1932 than during any of the previous years in all population groups.

TABLE 8.—PER CENT OF FAMILIES PROVIDED FOR BY DIFFERENT TYPES OF DWELLINGS IN CITIES HAVING A POPULATION OF 25,000 OR OVER, 1921 TO 1932

Population group	Year	Total number of families provided for	Per cent of families provided for in—		
			1-family dwellings	2-family dwellings ¹	Multifamily dwellings ²
500,000 and over (14 cities).....	1921	112,373	44.2	21.7	34.0
	1922	207,828	35.5	23.6	40.9
	1923	257,565	34.2	24.2	41.7
	1924	245,297	35.6	25.3	39.1
	1925	280,124	34.3	18.3	47.4
	1926	281,172	28.2	13.9	58.0
	1927	236,113	25.8	13.4	60.8
	1928	232,681	22.1	10.7	67.2
	1929	139,007	25.3	10.3	64.4
	1930	70,199	32.0	12.2	55.8
	1931	61,140	35.3	11.3	53.4
	1932	13,487	58.2	15.5	26.4
100,000 and under 500,000 (75 cities).....	1921	75,073	72.0	12.0	16.0
	1922	113,272	61.5	18.6	19.9
	1923	128,521	60.6	16.6	22.8
	1924	126,400	62.7	16.8	20.5
	1925	138,284	60.6	16.6	22.8
	1926	118,719	60.2	13.2	26.6
	1927	108,342	54.9	13.6	31.5
	1928	99,827	52.2	11.9	35.9
	1929	70,664	55.8	13.1	31.1
	1930	37,999	59.0	13.0	28.0
	1931	24,996	68.9	13.2	17.9
	1932	8,990	83.2	10.2	6.6
50,000 and under 100,000 (86 cities).....	1921	26,060	74.9	15.0	10.2
	1922	39,818	63.7	18.5	17.7
	1923	47,916	61.3	19.1	19.6
	1924	49,778	60.0	14.8	25.2
	1925	49,812	61.6	15.3	23.1
	1926	43,155	57.5	14.7	27.8
	1927	42,911	52.8	12.2	35.0
	1928	38,804	55.4	10.7	33.9
	1929	23,365	65.3	11.0	23.7
	1930	10,884	69.6	9.7	20.7
	1931	7,703	74.5	9.5	16.0
	1932	3,008	84.4	8.0	7.5
25,000 and under 50,000 (82 cities).....	1921	11,039	68.7	18.2	13.1
	1922	16,387	64.2	16.7	19.1
	1923	19,671	62.8	18.2	19.0
	1924	21,444	67.4	20.2	12.4
	1925	23,002	67.5	18.8	13.7
	1926	19,168	65.6	17.5	16.9
	1927	18,729	66.5	14.2	19.4
	1928	17,366	68.2	12.5	19.3
	1929	11,358	72.3	14.7	13.0
	1930	6,240	77.8	9.4	12.9
	1931	4,339	86.6	8.5	4.9
	1932	1,896	87.7	7.9	4.4
Total (257 cities).....	1921	224,545	58.3	17.3	24.4
	1922	377,305	47.5	21.3	31.2
	1923	453,673	45.8	21.2	33.0
	1924	442,919	47.6	21.5	30.9
	1925	491,222	46.0	17.5	36.4
	1926	462,214	40.7	13.9	45.4
	1927	406,095	38.3	13.4	48.3
	1928	388,678	35.2	11.1	53.7
	1929	244,394	40.2	11.4	48.5
	1930	125,322	45.7	12.1	42.2
	1931	98,178	49.2	11.5	39.3
	1932	27,381	71.3	12.4	16.3

¹ Includes 1-family and 2-family dwellings with stores.² Includes multifamily dwellings with stores.

Table 9 shows the percentage of families provided for by the different types of buildings in each of the 14 cities having a population of 500,000 or over for the years 1921, 1930, 1931, and 1932.

TABLE 9.—PER CENT OF FAMILIES PROVIDED FOR BY DIFFERENT TYPES OF DWELLINGS IN CITIES HAVING A POPULATION OF 500,000 OR OVER, 1921, 1930, 1931, AND 1932

City and year	Total number of families provided for	Per cent of families provided for in—			City and year	Total number of families provided for	Per cent of families provided for in—		
		1-family dwellings	2-family dwellings ¹	Multifamily dwellings ²			1-family dwellings	2-family dwellings ¹	Multifamily dwellings ²
Baltimore:					New York City—Continued				
1921	2,176	85.0	4.5	10.5	Brooklyn—Con.				
1930	1,484	97.0	—	3.0	1930	9,275	12.8	10.6	76.5
1931	1,953	84.1	—	15.9	1931	10,837	9.0	12.3	78.6
1932	450	82.7	—	17.3	1932	1,615	19.8	26.9	53.4
Boston: ⁴					Manhattan: ⁴				
1921	878	15.5	30.5	54.0	1921	4,837	.7	3.7	95.5
1930	1,415	33.1	43.8	23.1	1930	8,669	.1	(³)	99.9
1931	1,796	28.8	24.4	46.8	1931	2,585	.2	.1	99.7
1932	344	59.3	24.7	16.0	1932	471	—	—	100.0
Buffalo:					Queens: ⁴				
1921	2,405	51.6	48.0	.4	1921	13,256	60.0	24.4	15.6
1930	1,072	15.2	52.7	32.1	1930	10,495	43.6	12.3	44.1
1931	1,029	9.5	61.9	28.6	1931	12,716	40.2	10.7	49.1
1932	174	24.7	70.7	4.6	1932	2,035	47.6	20.1	32.3
Chicago:					Richmond: ⁴				
1921	12,252	37.9	17.6	44.6	1921	2,594	100.0	—	—
1930	2,741	38.9	18.3	42.8	1930	731	27.9	62.1	10.0
1931	966	62.4	20.9	16.7	1931	1,061	33.8	32.2	33.9
1932	221	80.5	12.2	7.2	1932	232	79.3	20.7	—
Cleveland:					Philadelphia:				
1921	4,084	35.5	40.5	24.0	1921	2,406	93.3	—	6.7
1930	1,176	60.2	14.8	25.0	1930	1,744	69.8	5.8	24.4
1931	511	78.1	13.3	8.6	1931	1,028	81.1	7.0	11.9
1932	220	73.2	10.5	16.4	1932	534	95.1	3.7	1.1
Detroit:					Pittsburgh:				
1921	6,743	46.9	17.9	35.2	1921	1,335	59.3	26.8	13.9
1930	4,084	55.4	30.5	14.1	1930	1,349	66.1	13.0	20.9
1931	2,135	79.1	14.7	6.2	1931	919	68.7	11.3	20.0
1932	310	90.0	10.0	—	1932	197	91.9	6.1	2.0
Los Angeles:					St. Louis:				
1921	19,572	68.0	16.9	15.2	1921	2,072	49.0	24.1	26.8
1930	11,437	36.8	12.1	51.1	1930	1,618	51.8	11.6	36.6
1931	6,600	52.1	16.3	31.7	1931	1,491	65.1	12.5	22.5
1932	2,703	67.3	13.8	18.9	1932	553	83.4	11.6	5.1
Milwaukee:					San Francisco:				
1921	2,212	44.9	38.2	16.9	1921	2,683	37.6	17.0	45.4
1930	1,729	26.2	27.9	45.9	1930	2,206	53.2	5.9	40.9
1931	929	40.5	33.7	25.8	1931	2,441	69.4	5.2	25.4
1932	169	68.6	27.2	4.1	1932	1,073	68.0	15.2	16.8
New York City: ⁴					Washington:				
1921	51,360	31.6	24.2	44.2	1921	2,195	75.4	—	24.6
1930	36,182	18.3	8.2	73.5	1930	1,962	49.0	1.1	49.8
1931	35,736	20.5	9.5	70.1	1931	3,606	38.9	—	61.1
1932	5,347	34.9	20.8	44.3	1932	1,192	77.6	.8	21.6
The Bronx: ⁴					Total (14 cities):				
1921	14,037	11.7	11.9	76.4	1921	112,373	44.2	21.7	34.0
1930	7,012	9.3	3.6	87.2	1930	70,199	32.0	12.2	55.8
1931	8,537	10.0	4.0	86.0	1931	61,140	35.3	11.3	53.4
1932	994	39.8	22.0	38.1	1932	13,487	58.2	15.5	26.4
Brooklyn: ⁴									
1921	16,636	24.1	44.0	31.9					

¹ Includes 1-family and 2-family dwellings with stores.² Includes multifamily dwellings with stores.³ Less than one-tenth of 1 per cent.⁴ Applications filed.

During 1932, 12 of the 14 cities provided for a larger proportion of the family units in 1-family dwellings than in 2-family or multifamily dwellings. Buffalo, however, provided for the largest percentage of its dwelling units in 2-family dwellings, and New York City provided more housing units in apartment houses than in either 1-family or 2-family dwellings. Philadelphia provided, during 1932, for a smaller percentage of its families in apartment houses than any other city in this group. Only 1.1 per cent of the total family dwelling units provided in Philadelphia were in apartment houses, as compared

with 95.1 per cent in 1-family dwellings and 3.7 per cent in 2-family dwellings. In contrast, in the Borough of Manhattan no 1-family or 2-family dwellings were erected, all 471 families provided for in new buildings were to be housed in apartment houses. Detroit and Pittsburgh also provided for 90 per cent or more of the total family dwelling units in 1-family dwellings.

Five Leading Cities, 1921 to 1932

DURING 1932, the five cities leading in total expenditures for building operations were New York, Washington, Philadelphia, Los Angeles, and San Francisco, in the order named. New York and Los Angeles have been among the five leading cities for every year since 1921. Philadelphia has been one of the five leading cities since 1922. Washington has been among the select group only during the past three years. This is the first appearance of San Francisco among the first five.

Table 10 ranks the cities according to their total expenditures for building construction of all kinds as shown by permits issued.

TABLE 10.—FIVE CITIES LEADING IN TOTAL EXPENDITURE, EACH YEAR, 1921 TO 1932

Year and city	Total expenditure	Year and city	Total expenditure
1921		1927	
New York	\$442,285,248	New York	\$880,333,455
Chicago	133,027,910	Chicago	365,065,042
Cleveland	86,680,023	Detroit	145,555,647
Los Angeles	82,761,386	Los Angeles	123,027,139
Detroit	58,086,053	Philadelphia	117,590,650
1922		1928	
New York	645,176,481	New York	916,671,855
Chicago	229,853,125	Chicago	323,509,048
Los Angeles	121,206,787	Detroit	129,260,285
Philadelphia	114,190,525	Philadelphia	112,225,865
Detroit	93,614,593	Los Angeles	101,678,768
1923		1929	
New York	789,265,335	New York	942,297,219
Chicago	334,164,404	Chicago	210,797,640
Los Angeles	200,133,181	Philadelphia	104,405,545
Detroit	129,719,831	Detroit	100,567,497
Philadelphia	128,227,405	Los Angeles	93,020,160
1924		1930	
New York	836,043,604	New York	410,165,789
Chicago	308,911,159	Chicago	85,749,167
Detroit	160,547,723	Los Angeles	75,356,715
Los Angeles	150,147,516	Philadelphia	53,141,770
Philadelphia	141,402,655	Washington	48,823,891
1925		1931	
New York	1,020,604,713	New York	362,864,076
Chicago	373,803,571	Chicago	66,600,556
Detroit	180,132,528	Washington	52,588,151
Philadelphia	171,034,280	Los Angeles	41,421,685
Los Angeles	152,646,436	Philadelphia	35,265,216
1926		1932	
New York	1,039,670,572	New York	78,851,588
Chicago	376,808,480	Washington	59,927,302
Detroit	183,721,443	Philadelphia	17,862,661
Philadelphia	140,093,075	Los Angeles	17,785,627
Los Angeles	123,006,215	San Francisco	16,465,092

Table 11 shows the number of family dwelling units provided per 10,000 of population in the five cities leading in this particular feature.

TABLE 11.—FAMILIES PROVIDED FOR BY RESIDENTIAL CONSTRUCTION, PER 10,000 OF POPULATION, IN THE FIVE LEADING CITIES EACH YEAR, 1921 TO 1932

Year and city	Families provided for per 10,000 of population	Year and city	Families provided for per 10,000 of population
1921		1927	
Long Beach, Calif.	631.9	Irvington, N. J.	740.5
Los Angeles, Calif.	320.9	White Plains, N. Y.	419.5
Pasadena, Calif.	251.7	Mount Vernon, N. Y.	414.8
Shreveport, La.	249.8	Yonkers, N. Y.	349.0
Lakewood, Ohio	191.3	East Orange, N. J.	338.1
1922		1928	
Long Beach, Calif.	1,081.0	Yonkers, N. Y.	347.6
Los Angeles, Calif.	441.6	Mount Vernon, N. Y.	299.1
Lakewood, Ohio	358.9	White Plains, N. Y.	298.3
Miami, Fla.	268.1	Long Beach, Calif.	297.4
East Cleveland, Ohio	267.6	Irvington, N. J.	255.4
1923		1929	
Long Beach, Calif.	1,038.1	Long Beach, Calif.	306.9
Los Angeles, Calif.	657.4	Phoenix, Ariz.	236.3
Miami, Fla.	611.1	Houston, Tex.	211.6
Irvington, N. J.	432.1	Pontiac, Mich.	208.8
Lakewood, Ohio	381.5	Wichita, Kans.	159.1
1924		1930	
Miami, Fla. ¹	2,248.9	Long Beach, Calif.	141.0
Irvington, N. J.	501.2	Oklahoma City, Okla.	109.7
Los Angeles, Calif. ²	448.3	Los Angeles, Calif.	92.9
San Diego, Calif.	378.0	Austin, Tex.	92.8
Long Beach, Calif.	347.6	Bloomfield, N. J.	90.4
1925		1931	
Miami, Fla. ¹	1,342.0	Austin, Tex.	98.5
San Diego, Calif.	392.0	Alhambra, Calif.	87.2
Tampa, Fla.	379.3	Glendale, Calif.	79.3
Irvington, N. J.	374.6	Yonkers, N. Y.	73.6
Los Angeles, Calif. ²	331.0	Washington, D. C.	73.4
1926		White Plains, N. Y.	73.4
St. Petersburg, Fla.	700.3	Austin, Tex.	44.0
Mount Vernon, N. Y.	644.7	Sioux Falls, S. Dak.	27.6
Irvington, N. J.	398.6	Alhambra, Calif.	25.4
White Plains, N. Y.	367.2	Washington, D. C.	24.2
San Diego, Calif.	339.5	Glendale, Calif.	23.6
1932			

¹ The ratio of families provided for in Miami in 1924 was based on the population as estimated by the Census Bureau for that year. In the light of the actual census taken by the State enumeration in 1925, it would seem that the estimate for 1924 was below the actual population for that year, hence the ratio here shown for 1924 is probably higher than the actual population in that year would warrant.

² Population not estimated in 1924 or 1925; 1923 estimate used.

During 1932, Austin, Tex., provided for more family dwelling units per 10,000 of population than any other city in the United States. This city, however, provided for only 44 families to each 10,000 population. The lowest of the leading five cities for the year 1931 provided for 73.4 families per 10,000 of population. Back in the years of the Florida land boom, Miami, Fla., provided for more than 2,000 families per 10,000 of population.

The figures in Table 11 show the number of families provided for per 10,000 of population, according to the last estimate available each year, as prepared by the Bureau of the Census. The 1930 ratios are based on the 1930 census enumeration.

Prices of Building Materials, Wages, and Rents

THE Bureau of Labor Statistics collects monthly the wholesale prices of building materials and from such figures computes index numbers. Retail prices paid by builders are not available, but it is believed that the trend of retail prices follows closely that of wholesale prices.

The index numbers shown in Table 12 for wage rates in the building trades are for wage rates for union labor only. In many cities the building trades are highly organized, while in others there is considerable nonunion labor. The bureau has no data concerning the trend of wages of nonunion workers.

Information concerning rents are collected by the bureau semi-annually in 32 cities.

Based on 1921, the index number of expenditures for building operations reached a peak of 217.6 in 1925, and has been falling steadily ever since. The index number of wholesale prices of building materials reached a peak of 111.6 in 1923. There has been a steady decline each year since, except in 1929, when there was a slight increase over 1928.

Union wage rates in the building trades reached a peak of 137.9 in 1931. The 1932 figures fell to 117.5.

Rents climbed slightly each year until the peak, 104.7, was reached in 1924, and have declined each year since that date.

TABLE 12.—INDEX NUMBERS OF ESTIMATED EXPENDITURES FOR BUILDING OPERATIONS, OF WHOLESALE PRICES OF BUILDING MATERIALS, OF UNION WAGE RATES IN THE BUILDING TRADES, AND OF RENT, 1921 TO 1932

Year	Estimated expenditures for building operations	Wholesale prices of building materials	Union wage rates per hour in the building trades	Rent (32 cities)
1921	100.0	100.0	100.0	100.0
1922	150.1	99.9	93.4	100.6
1923	184.9	111.6	103.6	102.5
1924	189.0	105.0	112.2	104.7
1925	217.6	104.4	116.3	104.4
1926	206.2	102.7	124.0	102.9
1927	187.4	97.2	128.5	100.6
1928	178.1	96.6	129.0	97.9
1929	158.1	97.9	130.6	95.4
1930	91.6	92.3	136.2	92.4
1931	66.7	81.4	137.9	86.8
1932	25.9	73.3	117.5	76.7

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in the Pottery Industry, 1925 and 1932

THREE are presented below the results of the study made by the Bureau of Labor Statistics of wages and hours of labor of wage earners in the general-ware pottery industry in the year 1932, together with comparable data for a similar study of this industry made in 1925. The data are presented by occupation and sex, for each of two kinds of pottery ware, semivitreous and vitreous, and for all occupations combined in each of these two divisions of the industry. The details of the 1925 study were published in Bulletin No. 412, and those of the 1932 study will be published later as a bulletin of the bureau. Each study covered a representative pay period of two weeks in the summer and the early fall, and the studies are therefore representative of conditions as to hours and earnings of wage earners in such potteries as of that period in 1925 and 1932.

In making the studies agents of the bureau collected individual wage figures for 6,666 males and 3,657 females from the pay rolls and other records of 46 representative semivitreous-ware potteries in 8 States and 1,619 males and 1,065 females in 7 vitreous-ware potteries in 4 States in 1925; and for 4,086 males and 2,381 females of 27 semivitreous-ware potteries in 9 States and 1,429 males and 990 females of 12 vitreous-ware potteries in 4 States in 1932. Many of the semivitreous potteries that were included in 1925 were out of business or not in operation in 1932. The semivitreous-ware wage figures for 1925 are for 31 potteries in Ohio, 7 in West Virginia, 3 in New Jersey, 2 in Pennsylvania, and 1 each in Maryland, Tennessee, and Virginia; and for 1932 are for 11 in Ohio, 8 in West Virginia, 2 in New Jersey, and 1 each in Pennsylvania, Maryland, Tennessee, Virginia, Illinois, and Indiana. The vitreous-ware figures in 1925 are for 3 potteries in New York, 2 in Pennsylvania, and 1 each in New Jersey and West Virginia, and in 1932 are for 4 in New York, 3 in Pennsylvania, 3 in West Virginia, and 2 in Ohio.

Average Days, Hours, and Earnings

By Occupation and Sex

TABLE 1 shows for the wage earners covered in each of the more important occupations in semivitreous and also in vitreous ware potteries in 1925 and in 1932 and also for a miscellaneous group designated as "other employees" average days worked in two weeks, average hours worked in two weeks and per day, and average earnings in two weeks, per day, and per hour. The miscellaneous group of "other employees" includes all occupations in each of the two kinds of potteries other than those referred to as important occupations. No occupation in the miscellaneous group is considered of enough importance to warrant showing averages for it.

In 1932 the 6,467 wage earners of the 27 semivitreous potteries worked an average of 7.5 days and 57.6 hours in two weeks and 7.7

hours per day, and earned an average of \$25.93 in two weeks, \$3.47 per day, and 45 cents per hour. These averages are 1.6 days and 14.9 hours less in two weeks and three-tenths of an hour less per day and \$17.34 less in two weeks, \$1.29 less per day, and 14.6 cents less per hour than those for the 10,323 wage earners of the 46 semivitreous potteries covered in the 1925 study. Average earnings per hour in 1932 were 24.5 per cent less than in 1925.

In 1932 the 2,419 wage earners of the 12 vitreous potteries included in the report worked an average of 6.1 days and 43.7 hours in two weeks and 7.2 hours per day and earned an average of \$19.15 in two weeks, \$3.16 per day, and 43.8 cents per hour. These averages are 4 days 37.4 hours less in two weeks, and eight-tenths of an hour less per day, and \$23.08 less in two weeks, \$1.03 less per day, and 8.3 cents less per hour than the averages for the 2,684 wage earners of the 7 vitreous potteries covered in the 1925 study. Average earnings per hour in 1932 were 15.9 per cent less than in 1925.

In semivitreous potteries average earnings per hour of males in each of the occupations in the table except two (pressers and ware carriers) and of females in each occupation in which females were reported were less in 1932 than in 1925. Pressers, male, in 1925 (12 in 9 potteries) earned an average of 64.9 cents per hour and in 1932 (1 in 1 pottery) earned an average of \$1.22 per hour, and ware carriers earned an average of 32.6 cents per hour in 1925 and 34.3 cents in 1932. Averages are shown in the table for 1925 and 1932 for males in 44 occupations and for females in 15 occupations.

In vitreous potteries average earnings per hour of males in each occupation except four (batters-out, dish makers, turners' spongers, and ware carriers) were less in 1932 than in 1925, and of females in each occupation except two (gold stampers and wrappers) in which wage figures for them were reported were less in 1932 than in 1925. Averages are shown in the table for 1925 and 1932 for males in 41 occupations and the group of other employees and for females in 14 occupations and the group of other employees.

TABLE 1.—AVERAGE DAYS, HOURS, AND EARNINGS IN THE POTTERY INDUSTRY 1925 AND 1932, BY KIND OF WARE, OCCUPATION, AND SEX

Kind of ware, occupation, and sex	Year	Number of establishments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous</i>									
Slip makers, male	1925	46	54	9.3	83.7	9.0	\$62.50	\$6.74	\$0.746
	1932	27	37	8.9	70.9	8.0	36.82	4.14	.519
Laborers, slip house, male	1925	46	136	8.9	76.9	8.6	44.22	4.96	.575
	1932	24	81	8.4	66.6	7.9	30.42	3.61	.457
Mold makers, male	1925	46	94	10.4	85.8	8.2	91.28	8.75	1.064
	1932	23	62	6.9	56.9	8.3	45.79	6.66	.805
Clay carriers, male	1925	31	48	8.6	75.3	8.7	46.19	5.37	.614
	1932	20	35	8.0	69.0	8.6	29.74	3.70	.431
Batters-out, male	1925	46	357	8.1	65.7	8.1	37.14	4.59	.565
	1932	26	222	7.4	57.7	7.8	25.46	3.45	.441
Cup ballers, male	1925	42	70	8.1	62.8	7.7	21.35	2.62	.340
	1932	22	53	7.4	54.7	7.4	16.51	2.24	.302
Jigger men	1925	46	500	8.6	69.3	8.1	62.54	7.27	.902
	1932	27	299	7.7	59.0	7.7	39.87	5.20	.676
Mold runners, male	1925	42	344	8.2	64.7	7.9	30.47	3.73	.471
	1932	24	246	7.6	58.9	7.8	20.54	2.71	.348
Finishers, male	1925	28	66	8.7	65.7	7.6	35.75	4.12	.544
	1932	10	36	7.5	57.4	7.7	22.38	2.98	.390
Finishers, female	1925	44	291	8.0	59.5	7.4	31.19	3.89	.524
	1932	21	200	7.9	61.0	7.7	23.99	3.05	.394

TABLE 1.—AVERAGE DAYS, HOURS, AND EARNINGS IN THE POTTERY INDUSTRY, 1925 AND 1932, BY KIND OF WARE, OCCUPATION, AND SEX—Continued

Kind of ware, occupation, and sex	Year	Number of establishments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous—Continued</i>									
Dish makers, male	1925	42	124	8.9	78.3	8.8	\$63.66	\$7.18	\$0.813
	1932	24	72	8.7	74.7	8.6	52.08	6.01	.697
Dish makers' helpers, male	1925	23	39	9.2	78.2	8.5	41.56	4.54	.532
	1932	16	30	8.0	64.5	8.1	28.85	3.62	.447
Dish makers' helpers, female	1932	1	1	9.0	38.5	4.3	13.50	1.50	.351
Turners, male	1925	46	162	8.4	67.0	7.9	63.10	7.48	.942
	1932	25	106	7.4	47.8	6.5	37.44	5.06	.783
Turners' spongers, male	1925	31	47	8.5	69.4	8.2	24.52	2.89	.354
	1932	14	34	6.8	41.5	6.1	11.80	1.73	.284
Turners' spongers, female	1925	5	5	7.8	61.4	7.9	19.44	2.49	.317
Handlers, male	1925	46	135	8.7	71.3	8.2	68.10	7.85	.955
	1932	27	102	7.7	56.7	7.3	43.22	5.60	.763
Handle casters and finishers, male	1925	40	102	9.0	74.4	8.2	39.27	4.35	.528
	1932	24	97	8.2	60.4	7.4	23.66	2.88	.392
Handle casters and finishers, female	1925	7	10	7.8	68.9	8.8	25.32	3.25	.367
	1932	1	1	12.0	96.0	8.0	28.33	2.36	.295
Stickers-up, male	1925	5	5	7.8	71.2	9.1	42.23	5.41	.593
	1932	5	5	10.2	77.4	7.6	28.72	2.82	.371
Casters, male	1925	46	250	8.9	80.1	9.0	72.29	8.08	.903
	1932	23	128	8.3	71.6	8.6	43.10	5.18	.602
Pressers, male	1925	9	12	9.2	81.1	8.8	52.62	5.74	.649
	1932	1	1	6.0	50.0	8.3	61.00	10.17	1.220
Laborers, sagger shop, male	1925	25	77	9.4	81.3	8.7	44.56	4.75	.548
	1932	14	51	6.8	51.2	7.5	19.62	2.87	.383
Sagger makers, hand, male	1925	44	98	8.5	71.0	8.3	68.27	8.01	.961
	1932	21	34	7.6	56.1	7.4	39.70	5.23	.708
Sagger makers' helpers, hand, male	1925	24	41	8.4	67.7	8.1	53.65	6.39	.793
	1932	8	11	6.4	43.4	6.8	23.64	3.71	.545
Sagger makers, machine, male	1925	17	36	8.6	73.9	8.5	46.49	5.38	.629
	1932	14	26	7.7	61.4	8.0	33.36	4.34	.543
Kiln placers, bisque, male	1925	46	197	9.0	59.7	6.6	62.82	6.96	1.052
	1932	27	184	7.0	46.2	6.6	35.63	5.12	.771
Kiln placers, boss, bisque, male	1925	46	57	9.5	62.7	6.6	79.84	8.40	1.273
	1932	26	29	7.8	53.0	6.8	49.04	6.29	.926
Firemen, bisque and glost	1925	42	102	11.5	129.1	11.2	68.51	5.96	.531
	1932	25	75	9.8	91.6	9.3	42.87	4.36	.468
Kiln drawers, bisque and glost, male	1925	46	406	7.9	47.2	6.0	33.89	4.29	.718
	1932	26	184	6.1	40.3	6.6	20.61	3.39	.511
Kiln drawers, boss, bisque and glost, male	1925	45	49	9.0	54.3	6.0	44.92	5.00	.827
	1932	20	26	7.4	54.1	7.3	32.04	4.34	.592
Laborers, kiln shed, male	1925	39	195	10.0	92.0	9.2	46.43	4.66	.505
	1932	14	48	9.3	76.5	8.3	29.74	3.22	.389
Drawers (in warehouse), bisque and glost, male	1932	1	4	12.0	99.5	8.3	19.42	1.62	.195
Drawers (in warehouse), bisque and glost, female	1925	45	210	8.0	48.1	6.0	22.07	2.76	.459
Brushers, male	1932	25	126	6.8	46.9	6.9	14.65	2.15	.313
Brushers, female	1925	1	6	12.0	101.5	8.5	13.96	1.16	.138
	1925	45	487	8.6	66.3	7.7	21.21	2.46	.320
Stampers, bisque, female	1932	25	306	7.0	54.6	7.8	13.03	1.86	.239
	1925	29	52	9.2	71.5	7.7	23.55	2.55	.330
Glaze mixers, male	1925	16	32	7.8	60.4	7.7	14.71	1.88	.244
	1932	34	35	10.3	92.2	9.0	48.38	4.72	.525
Glaze mixers' helpers, male	1925	23	23	8.9	77.7	8.7	32.05	3.60	.413
	1925	8	10	9.9	86.1	8.7	43.02	4.35	.500
Ware boys	1925	4	8	7.4	63.3	8.6	26.89	3.65	.425
	1932	37	53	9.0	65.9	7.3	33.43	3.70	.508
Dippers, male	1925	23	41	7.7	58.6	7.6	21.21	2.74	.362
	1925	46	126	9.2	60.8	6.6	75.02	8.20	1.233
Dippers' helpers, male	1925	27	125	7.6	50.9	6.7	41.36	5.43	.813
	1932	12	24	10.1	74.0	7.3	27.26	2.70	.368
Dippers' helpers, female	1925	3	16	8.8	66.4	7.6	16.89	1.93	.254
	1932	42	261	8.2	54.8	6.7	21.03	2.56	.384
Kiln placers, glost, male	1925	45	432	9.1	62.2	6.8	64.85	7.10	1.042
	1932	24	293	7.0	50.6	7.2	38.26	5.48	.756
Kiln placers, boss, glost, male	1925	45	68	9.6	65.9	6.8	82.16	8.53	1.247
	1932	23	31	7.7	56.3	7.3	50.51	6.58	.897
Pin boys	1925	25	36	9.7	67.3	6.9	39.51	4.08	.587
	1932	8	10	7.3	46.9	6.4	21.47	2.94	.457
Dressers (grinders), male	1932	7	31	7.7	61.8	8.0	20.12	2.61	.325
Dressers, female	1925	46	335	8.7	68.0	7.8	23.67	2.73	.348
	1932	26	250	6.3	48.4	7.7	13.68	2.18	.283
Dressers, forelady	1925	40	47	9.7	80.6	8.3	39.35	4.07	.488
	1932	10	11	7.2	58.3	8.1	25.73	3.58	.441

TABLE 1.—AVERAGE DAYS, HOURS, AND EARNINGS IN THE POTTERY INDUSTRY, 1925 AND 1932, BY KIND OF WARE, OCCUPATION, AND SEX—Continued

Kind of ware, occupation, and sex	Year	Number of establishments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous—Continued</i>									
Warehousemen	1925	44	407	10.2	89.1	8.8	\$52.11	\$5.12	\$0.585
	1932	27	248	7.1	56.6	7.9	26.43	3.71	.467
Selectors, male	1932	2	7	8.4	71.6	8.5	27.48	3.26	.384
Selectors, female	1932	4	12	5.9	48.3	8.2	11.73	1.98	.243
Ware carriers, male	1925	24	38	10.2	87.1	8.5	28.44	2.79	.326
	1932	20	51	7.4	59.8	8.0	20.51	2.76	.343
Dusters, female	1925	26	130	9.7	82.8	8.5	20.49	2.11	.248
	1932	17	137	6.1	50.2	8.2	11.50	1.87	.229
Stampers, gold, female	1925	31	80	8.6	67.1	7.8	26.95	3.13	.402
	1932	11	49	8.9	62.2	7.0	15.79	1.78	.254
Gilders and liners, male	1925	41	249	9.7	76.9	8.0	58.37	6.05	.759
	1932	21	163	7.6	52.2	6.8	30.66	4.01	.588
Gilders and liners, female	1925	42	356	9.5	71.2	7.5	37.56	3.95	.528
	1932	23	176	7.5	52.1	6.9	20.15	2.68	.387
Cutters, decalcomania, female	1925	15	28	9.9	84.0	8.5	29.25	2.95	.348
	1932	21	44	7.7	63.2	8.2	19.08	2.48	.302
Transferrers, decalcomania and print, female	1925	46	1,022	9.3	76.4	8.2	28.63	3.09	.375
	1932	27	751	7.0	56.6	8.0	16.35	2.33	.289
Printers, male	1925	7	7	9.0	70.4	7.8	48.20	5.36	.685
	1932	2	9	9.1	67.1	7.4	37.93	4.16	.565
Kiln placers and drawers, decorating, male	1925	46	152	9.6	75.6	7.9	58.37	6.08	.772
	1932	24	109	6.8	53.9	8.0	27.32	4.05	.507
Firemen, decorating	1925	30	42	10.0	99.6	9.9	88.66	8.82	.890
	1932	12	25	7.2	62.5	8.6	38.92	5.38	.623
Burnishers, female	1925	4	6	9.5	60.2	6.3	15.29	1.61	.254
Wrappers, female	1925	29	92	9.1	76.7	8.4	21.59	2.36	.281
	1932	9	21	7.2	52.1	7.2	11.30	1.57	.217
Straw boys	1925	14	22	9.0	68.3	7.5	22.17	2.45	.325
	1932	8	15	8.8	69.2	7.9	17.95	2.04	.259
Packers, male	1925	46	135	9.7	70.4	7.2	59.95	6.17	.851
	1932	25	95	8.5	57.8	6.8	32.76	3.87	.567
Packers, strawless, male	1932	4	16	5.2	31.7	6.1	6.76	1.30	.213
Packers, strawless, female	1932	6	26	8.0	62.9	7.9	14.63	1.84	.233
Packers, head, male	1925	28	28	10.5	83.5	8.0	80.25	7.67	.962
	1932	12	12	10.4	78.6	7.5	54.33	5.22	.691
Packers, head, female	1932	1	1	10.0	71.8	7.2	20.33	2.03	.283
Other employees, male	1925	46	999	10.1	88.7	8.8	45.05	4.45	.508
	1932	27	434	8.7	76.8	8.8	30.62	3.52	.399
Other employees, female	1925	42	245	8.8	72.5	8.3	23.83	2.72	.329
	1932	7	39	8.8	74.1	8.4	16.14	1.84	.218
Total, males	1925	46	6,666	9.2	74.4	8.1	52.44	5.70	.705
	1932	27	4,086	7.7	59.3	7.7	31.74	4.13	.535
Total, females	1925	46	3,657	8.9	69.0	7.8	26.54	2.99	.385
	1932	27	2,381	7.1	54.6	7.7	15.95	2.25	.292
Total, males and females	1925	46	10,323	9.1	72.5	8.0	43.27	4.76	.596
	1932	27	6,467	7.5	57.6	7.7	25.93	3.47	.450
<i>Vitreous</i>									
Slip makers, male	1925	6	6	11.5	106.1	9.2	77.16	6.71	.727
	1932	12	16	8.3	66.4	8.1	39.65	4.81	.597
Laborers, slip house, male	1925	7	42	9.9	88.1	8.9	44.59	4.52	.506
	1932	11	45	5.9	44.8	7.6	19.86	3.36	.444
Mold makers, male	1925	7	20	10.2	81.2	8.0	82.39	8.12	1,014
	1932	12	22	5.9	47.6	8.1	36.51	6.18	.766
Clay carriers, male	1925	5	7	10.4	86.9	8.3	40.23	3.86	.463
	1932	9	13	5.8	44.4	7.7	17.33	3.00	.391
Batters-out, male	1925	7	81	9.4	78.4	8.4	32.42	3.46	.414
	1932	10	55	5.6	37.1	6.6	15.91	2.82	.429
Cup ballers, male	1932	7	13	4.8	34.8	7.2	14.06	2.90	.404
Jigger men	1925	7	101	9.9	82.1	8.3	73.70	7.41	.898
	1932	12	121	5.2	38.1	7.3	27.56	5.29	.724
Mold runners, male	1925	5	48	9.2	71.2	7.7	28.31	3.08	.398
	1932	10	60	5.0	32.6	6.6	11.80	2.38	.362
Finishers, male	1925	3	11	9.1	77.9	8.6	37.22	4.09	.478
	1932	2	5	6.4	45.4	7.1	20.15	3.15	.444
Finishers, female	1925	7	79	9.7	77.2	7.9	30.49	3.14	.395
	1932	12	102	5.7	39.8	7.0	12.47	2.18	.313
Dish makers, male	1925	3	5	10.6	89.7	8.5	73.67	6.95	.821
	1932	4	6	5.7	39.5	7.0	37.20	6.56	.943
Dish makers' helpers, male	1932	1	2	4.0	14.8	3.7	7.15	1.79	.485
Dish makers' helpers, female	1932	2	2	5.5	37.3	6.8	15.85	2.88	.426
Turners, male	1925	7	37	9.7	77.5	8.0	66.38	6.84	.857
	1932	12	38	6.1	44.4	7.2	31.28	5.10	.705
Turners' spongers, male	1925	5	5	10.2	84.4	8.3	24.60	2.41	.292
	1932	6	10	6.4	43.4	6.8	12.84	2.01	.296

TABLE 1.—AVERAGE DAYS, HOURS, AND EARNINGS IN THE POTTERY INDUSTRY, 1925 AND 1932, BY KIND OF WARE, OCCUPATION, AND SEX—Continued

Kind of ware, occupation, and sex	Year	Number of establish- ments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Vitreous—Continued</i>									
Turners' spongers, female	1925	2	5	8.0	63.3	7.9	\$17.26	\$2.16	\$0.273
	1932	4	10	3.7	27.5	7.4	6.91	1.87	.251
Handlers, male	1925	7	23	10.6	89.2	8.4	82.24	7.75	.922
	1932	10	25	7.4	47.6	6.4	34.44	4.63	.724
Handlers, female	1932	2	11	2.6	20.5	7.8	8.80	3.34	.429
Handle casters and finishers, male	1925	6	18	9.9	80.2	8.1	29.29	2.96	.365
	1932	9	19	6.6	46.0	6.9	15.81	2.38	.344
Handle casters and finishers, female	1925	2	5	10.8	84.2	7.8	33.41	3.09	.397
	1932	3	5	4.0	25.5	6.4	8.25	2.06	.324
Stickers-up, male	1932	1	1	3.0	10.0	3.3	3.18	1.06	.318
Casters, male	1925	6	35	10.1	89.5	8.9	72.94	7.23	.815
	1932	12	34	6.6	51.4	7.8	30.87	4.69	.601
Casters, female	1932	1	1	6.0	42.3	7.1	15.98	2.66	.378
Pressers, male	1925	4	4	10.3	91.5	8.9	81.10	7.91	.887
Laborers, sagger shop, male	1925	6	71	10.5	90.0	8.6	43.34	4.12	.481
	1932	7	19	6.1	42.4	6.9	16.68	2.73	.394
Sagger makers, hand, male	1925	6	16	8.4	65.2	7.8	65.85	7.86	1.010
	1932	10	16	5.8	44.0	7.6	26.91	4.68	.612
Sagger makers' helpers, hand, male	1925	2	5	10.0	89.5	9.0	60.97	6.10	.681
	1932	2	3	2.7	20.3	7.6	9.21	3.45	.453
Sagger makers, machine, male	1925	3	8	11.3	83.4	7.4	77.98	6.93	.935
	1932	6	9	7.0	45.3	6.5	25.06	3.58	.553
Kiln placers, bisque, male	1925	7	68	9.6	62.9	6.6	63.07	6.57	1.002
	1932	12	52	5.8	34.3	5.9	27.22	4.72	.794
Kiln placers, boss, bisque, male	1925	7	12	10.4	66.5	6.4	83.05	7.97	1.249
	1932	12	14	6.6	40.6	6.1	38.02	5.72	.937
Firemen, bisque and glost	1925	7	16	11.9	128.2	10.7	80.39	6.73	.627
	1932	12	24	8.5	82.7	9.7	41.61	4.90	.503
Kiln drawers, bisque and glost male	1925	5	48	10.6	72.6	6.9	49.26	4.65	.678
	1932	10	69	4.4	29.6	6.8	15.21	3.49	.513
Kiln drawers, boss, bisque and glost, male	1925	5	5	10.0	65.0	6.5	52.63	5.26	.810
	1932	8	9	6.4	40.7	6.3	21.89	3.40	.538
Laborers, kiln shed, male	1925	5	46	9.6	84.7	8.8	40.85	4.24	.482
	1932	6	21	6.5	45.8	7.0	17.31	2.65	.378
Drawers (in warehouse), bisque and glost, female	1925	5	42	10.7	73.6	6.9	22.04	2.05	.300
	1932	10	81	5.7	41.6	7.3	11.05	1.93	.266
Ware cleaners (sand blasters and tumblers), male	1932	8	25	5.4	39.4	7.3	15.38	2.85	.390
Brushers, female ¹	1925	5	38	10.2	79.7	7.8	22.70	2.24	.285
Ware cleaners (brushers and sand blasters), female	1932	8	41	6.5	46.0	7.0	11.47	1.75	.249
Stampers, bisque, female	1925	2	5	9.6	76.2	7.9	20.75	2.16	.272
	1932	11	18	7.0	56.3	8.0	12.72	1.82	.226
Glaze mixers, male	1925	6	6	11.2	95.8	8.6	52.76	4.72	.551
	1932	9	9	9.0	68.5	7.6	30.29	3.37	.442
Glaze mixers' helpers, male	1925	2	2	11.5	97.8	8.5	46.48	4.04	.475
	1932	1	1	6.0	36.0	6.0	14.58	2.43	.405
Ware boys	1925	3	6	10.0	77.6	7.8	36.64	3.66	.472
	1932	11	27	8.0	52.8	6.6	16.98	2.13	.322
Dippers, male	1925	7	28	10.6	79.6	7.5	72.97	6.88	.917
	1932	12	43	7.4	48.1	6.5	32.57	4.40	.677
Dippers' helpers, male	1925	7	44	9.7	75.6	7.8	27.93	2.89	.369
	1932	5	14	7.5	53.1	7.1	14.54	1.94	.274
Dippers' helpers, female	1925	4	9	10.0	79.6	8.0	26.30	2.63	.330
	1932	9	27	7.6	44.9	5.9	11.80	1.55	.263
Kiln placers, glost, male	1925	7	73	10.2	71.3	7.0	68.73	6.73	.964
	1932	11	83	6.5	38.6	6.0	27.73	4.29	.718
Kiln placers, boss, glost, male	1925	7	14	10.7	78.1	7.3	84.18	7.86	1.078
	1932	11	14	6.4	39.6	6.2	34.12	5.31	.862
Pin boys	1932	1	1	3.0	19.0	6.3	11.25	3.75	.592
Dressers, male	1925	5	39	11.1	89.9	8.1	45.23	4.06	.503
Dressers (grinders), male	1932	7	34	5.4	38.8	7.2	17.49	3.25	.451
Dressers, female	1925	7	84	9.3	70.8	7.6	18.66	2.01	.263
	1932	12	94	6.3	46.0	7.3	10.91	1.73	.237
Dressers, forelady	1932	4	4	7.5	65.0	8.7	26.95	3.59	.415
Warehousemen	1925	6	35	10.9	94.7	8.7	50.30	4.62	.531
	1932	10	27	6.1	45.0	7.4	21.22	3.47	.471
Selectors, male	1932	4	26	5.3	39.2	7.4	16.78	3.16	.428
Selectors, female	1932	6	26	8.3	57.6	6.9	15.30	1.84	.266
Ware carriers, male	1925	2	2	10.5	91.0	8.7	32.20	3.07	.354
	1932	6	14	8.1	62.1	7.6	23.54	2.89	.379
Ware cleaners (washers), male	1932	2	5	7.0	51.3	7.3	17.19	2.46	.335
Ware cleaners (dusters and washers) female	1932	5	13	4.9	34.0	6.9	7.54	1.53	.222
Stampers, gold, female	1925	3	10	9.8	74.6	7.6	17.53	1.79	.235
	1932	2	5	7.4	56.9	7.7	14.57	1.97	.256

¹ Called ware cleaners in 1932 study.

TABLE 1.—AVERAGE DAYS, HOURS, AND EARNINGS IN THE POTTERY INDUSTRY, 1925 AND 1932, BY KIND OF WARE, OCCUPATION, AND SEX—Continued

Kind of ware, occupation, and sex	Year	Num- ber of estab- lish- ments	Num- ber of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Vitreous—Continued</i>									
Gilders and liners, male	1925	6	66	10.7	83.1	7.8	\$74.25	\$6.94	\$0.893
	1932	10	62	6.4	40.9	6.4	27.55	4.32	.674
Gilders and liners, female	1925	7	54	9.4	71.4	7.6	45.28	4.80	.634
	1932	10	75	6.5	48.1	7.4	16.35	2.52	.340
Cutters, decalcomania, female	1925	3	7	11.1	83.3	7.5	21.92	1.97	.263
	1932	4	22	4.1	32.7	7.9	8.07	1.95	.247
Transferers, decalcomania and print, female	1925	7	474	9.9	77.7	7.8	25.77	2.59	.332
	1932	12	398	5.0	36.8	7.3	8.85	1.75	.240
Printers, male	1925	7	42	10.1	79.7	7.9	61.10	6.07	.766
	1932	12	33	6.2	47.1	7.5	28.20	4.52	.599
Kiln placers and drawers, decorating, male	1925	6	17	10.6	86.4	8.1	53.52	5.03	.619
	1932	4	5	7.4	48.3	6.5	23.45	3.17	.485
Firemen, decorating	1925	4	5	11.4	118.5	10.4	65.47	5.74	.553
	1932	1	1	11.0	81.5	7.4	44.83	4.08	.550
Burnishers, female	1925	3	5	10.8	71.7	6.6	32.08	2.97	.448
	1932	2	3	6.3	45.9	7.2	11.39	1.80	.248
Wrappers, female	1925	2	8	10.6	84.7	8.0	20.18	1.90	.238
	1932	2	2	9.5	72.0	7.6	18.72	1.97	.260
Straw boys	1925	3	4	9.0	73.9	8.2	26.15	2.91	.354
	1932	5	7	6.0	41.9	7.0	13.84	2.31	.330
Packers, male	1925	7	21	10.4	86.4	8.3	56.45	5.41	.654
	1932	12	25	7.0	49.5	7.0	31.58	4.49	.638
Packers, strawless, female	1932	1	3	6.7	49.8	7.5	11.96	1.79	.240
Packers, head, male	1925	2	2	11.5	94.4	8.2	107.99	9.39	1.144
	1932	3	3	10.0	76.4	7.6	44.88	4.49	.587
Other employees, male	1925	7	475	10.2	89.0	8.7	45.98	4.50	.517
	1932	12	249	7.5	60.4	8.1	29.14	3.91	.482
Other employees, female	1925	7	240	10.4	80.4	7.8	22.73	2.20	.283
	1932	4	47	5.4	38.4	7.0	9.51	1.75	.248
Total, males	1925	7	1,619	10.2	83.5	8.2	53.25	5.25	.638
	1932	12	1,429	6.3	45.8	7.2	24.99	3.94	.546
Total, females	1925	7	1,065	10.0	77.4	7.7	25.47	2.55	.329
	1932	12	990	5.6	40.7	7.2	10.73	1.90	.264
Total, males and females	1925	7	2,684	10.1	81.1	8.0	42.23	4.19	.521
	1932	12	2,419	6.1	43.7	7.2	19.15	3.16	.438

By Sex and Geographical Group

Table 2 shows average days, hours, and earnings for the wage earners covered in semivitreous potteries in 1925 and 1932 and in vitreous potteries in 1932. The averages are for each sex separately and for both sexes combined, and are shown by groups instead of by individual States, as for many of the major industries, to avoid presenting figures for one pottery alone.

The geographical groups for semivitreous potteries are:

Group 1, which includes potteries in East Liverpool, Ohio, and nearby potteries in West Virginia directly across the Ohio River from East Liverpool.

Group 2, which includes potteries in Ohio outside East Liverpool, and in Pennsylvania, Illinois, and Indiana.

Group 3, which includes potteries in Maryland, Tennessee, and Virginia.

Group 4, which includes potteries in West Virginia other than those near East Liverpool, and those in New Jersey.

The groups for vitreous potteries are:

Group 1, New York.

Group 2, Pennsylvania.

Group 3, Ohio and West Virginia.

In 1932 the 4,086 males in all groups combined in semivitreous potteries worked an average of 7.7 days and 59.3 hours in two weeks and 7.7 hours per day, and earned an average of \$31.74 in two weeks, \$4.13 per day, and 53.5 cents per hour. These averages, as compared with those for the 6,666 males covered in the 1925 study, are 1.5 days and 15.1 hours less in two weeks and four-tenths of an hour less per day, \$20.70 less in two weeks, \$1.57 less per day, and 17 cents less per hour. In 1932 the 2,381 females in all groups combined in semivitreous potteries worked an average of 7.1 days and 54.6 hours in two weeks and 7.7 hours per day, and earned an average of \$15.95 in two weeks, \$2.25 per day, and 29.2 cents per hour. These averages are 1.8 days and 14.4 hours less in two weeks and one-tenth of an hour less per day and \$10.59 less in two weeks, 74 cents less per day, and 9.3 cents less per hour than those for the 3,657 females included in the study in 1925.

Earnings per hour of males in semivitreous potteries averaged 70.5 cents in 1925 and 53.5 cents in 1932, and ranged, by groups, from a low of 56.2 cents for group 3 to a high of 73.6 for group 1 in 1925 and from 46.5 cents for group 3 to 56.9 cents for group 1 in 1932. Those for females averaged 38.5 cents per hour in 1925 and 29.2 cents in 1932, and ranged, by groups, in 1925 from 31 cents for group 3 to 41.4 cents for group 1, and in 1932 from 25.1 cents for group 3 to 31.2 cents for group 1. Those for males and females together averaged 59.6 cents per hour in 1925 and 45 cents in 1932 and ranged, by groups, from 48.6 to 63.1 cents in 1925 and from 41.1 to 48.1 cents per hour in 1932.

TABLE 2.—AVERAGE DAYS, HOURS, AND EARNINGS IN SEMIVITREOUS AND VITREOUS POTTERY WARE, 1925 AND 1932, BY SEX, AND GEOGRAPHICAL GROUP

Kind of ware, sex, and geographical group	Year	Num- ber of estab- lish- ments	Num- ber of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous</i>									
Males:									
Group 1.....	1925	22	3,231	8.9	71.0	8.0	\$52.27	\$5.89	\$0.736
	1932	6	1,815	7.0	56.3	8.0	32.00	4.57	.569
Group 2.....	1925	18	2,794	9.4	76.6	8.1	53.62	5.68	.700
	1932	13	1,369	7.6	53.0	6.9	27.18	3.56	.513
Group 3.....	1925	3	413	10.9	90.5	8.3	50.89	4.68	.562
	1932	3	304	10.5	88.2	8.4	40.98	3.89	.465
Group 4.....	1925	3	228	8.0	65.1	8.1	43.36	5.40	.666
	1932	5	598	8.4	68.4	8.1	36.71	4.37	.537
Total.....	1925	46	6,666	9.2	74.4	8.1	52.44	5.70	.705
	1932	27	4,086	7.7	59.3	7.7	31.74	4.13	.535
Females:									
Group 1.....	1925	22	1,614	8.7	68.5	7.8	28.31	3.24	.414
	1932	6	1,020	6.5	52.3	8.1	16.30	2.52	.312
Group 2.....	1925	18	1,729	8.9	68.1	7.7	25.07	2.82	.368
	1932	13	927	6.9	49.8	7.2	14.10	2.04	.283
Group 3.....	1925	3	193	10.3	83.6	8.1	25.94	2.53	.310
	1932	3	115	10.1	78.6	7.8	19.71	1.96	.251
Group 4.....	1925	3	121	8.2	66.1	8.0	24.89	3.03	.377
	1932	5	319	8.5	67.0	7.9	18.88	2.22	.282
Total.....	1925	46	3,657	8.9	69.0	7.8	26.54	2.99	.385
	1932	27	2,381	7.1	54.6	7.7	15.95	2.25	.292

TABLE 2.—AVERAGE DAYS, HOURS, AND EARNINGS IN SEMIVITREOUS AND VITREOUS POTTERY WARE, 1925 AND 1932, BY SEX, AND GEOGRAPHICAL GROUP—Con.

Kind of ware, sex, and geographical group	Year	Number of establish- ments	Num- ber of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
					In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous—Continued</i>									
Males and females:									
Group 1	1925	22	4,845	8.8	70.2	8.0	\$44.29	\$5.03	\$0.631
	1932	6	2,835	6.8	54.8	8.0	26.35	3.87	.481
Group 2	1925	18	4,523	9.2	73.3	8.0	42.71	4.63	.582
	1932	13	2,296	7.3	51.7	7.0	21.90	2.98	.423
Group 3	1925	3	606	10.7	88.3	8.3	42.95	4.02	.486
	1932	3	419	10.4	85.5	8.2	35.14	3.38	.411
Group 4	1925	3	349	8.1	65.5	8.1	36.95	4.57	.565
	1932	5	917	8.4	67.9	8.1	30.51	3.62	.449
Total	1925	46	10,323	9.1	72.5	8.0	43.27	4.76	.596
	1932	27	6,467	7.5	57.6	7.7	25.93	3.47	.450
<i>Vitreous¹</i>									
Males:									
Group 1	1932	4	665	5.7	42.7	7.5	22.89	4.03	.536
Group 2	1932	3	332	6.0	44.3	7.4	24.09	4.00	.544
Group 3	1932	5	432	7.6	51.7	6.8	28.90	3.79	.559
Total		12	1,429	6.3	45.8	7.2	24.99	3.94	.546
Females:									
Group 1	1932	4	375	4.8	33.6	7.0	9.20	1.92	.274
Group 2	1932	3	357	5.4	39.6	7.4	11.00	1.99	.271
Group 3	1932	5	258	7.3	52.6	7.3	12.97	1.79	.246
Total		12	990	5.6	40.7	7.2	10.73	1.90	.264
Males and females:									
Group 1	1932	4	1,040	5.4	39.4	7.4	17.96	3.35	.456
Group 2	1932	3	689	5.7	41.9	7.4	17.16	3.01	.410
Group 3	1932	5	690	7.5	52.1	7.0	22.94	3.07	.441
Total		12	2,419	6.1	43.7	7.2	19.15	3.16	.438

¹ No 1925 averages shown for this ware because only 4 of such potteries were included in report in that year.

By Occupations and Geographical Groups

The averages in Table 3 are limited to the wage earners in eight representative occupations in semivitreous and four in vitreous potteries in order to save space and expense in printing. They illustrate fairly the variations of days, hours, and earnings in each of the occupations in the two kinds of potteries in the different geographical groups.

TABLE 3.—AVERAGE DAYS, HOURS, AND EARNINGS IN EIGHT SPECIFIED OCCUPATIONS IN SEMIVITREOUS WARE AND FOUR IN VITREOUS WARE, 1932, BY GEOGRAPHICAL GROUP

Kind of ware, occupation, sex, and geographical group	Number of establishments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
				In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Semivitreous</i>								
Jigger men:								
Group 1.....	6	129	6.5	55.4	8.5	\$38.39	\$5.88	\$0.694
Group 2.....	13	110	8.2	53.7	6.6	34.08	4.17	.635
Group 3.....	3	20	10.2	86.6	8.5	60.77	5.96	.701
Group 4.....	5	40	8.7	71.4	8.2	50.12	5.74	.702
Total.....	27	299	7.7	59.0	7.7	39.87	5.20	.676
Finishers, female:								
Group 1.....	6	96	6.6	54.1	8.2	25.22	3.84	.466
Group 2.....	11	66	8.2	55.4	6.7	18.90	2.30	.341
Group 3.....	1	4	10.5	87.5	8.3	33.00	3.14	.377
Group 4.....	3	34	10.5	88.0	8.4	29.36	2.79	.334
Total.....	21	200	7.9	61.0	7.7	23.99	3.05	.394
Kiln placers, bisque, male:								
Group 1.....	6	80	6.9	50.3	7.3	36.70	5.30	.729
Group 2.....	13	72	6.2	34.7	5.6	26.03	4.22	.749
Group 3.....	3	7	10.9	81.1	7.5	68.82	6.34	.848
Group 4.....	5	25	8.2	56.2	6.8	50.60	6.14	.900
Total.....	27	184	7.0	46.2	6.6	35.63	5.12	.771
Kiln drawers, bisque and glost, male:								
Group 1.....	6	38	7.6	61.0	8.0	30.02	3.96	.492
Group 2.....	12	68	5.5	29.6	5.4	15.06	2.73	.510
Group 3.....	3	19	10.4	81.4	7.8	35.11	2.37	.431
Group 4.....	5	59	4.4	26.2	6.0	16.27	3.73	.621
Total.....	26	184	6.1	40.3	6.6	20.61	3.39	.511
Brushers, female:								
Group 1.....	6	159	7.1	59.5	8.4	13.98	1.97	.235
Group 2.....	12	107	6.0	37.6	6.3	9.23	1.54	.246
Group 3.....	2	11	9.5	78.7	8.3	18.37	1.94	.233
Group 4.....	5	29	9.4	81.2	8.6	19.84	2.10	.244
Total.....	25	306	7.0	54.6	7.8	13.03	1.86	.239
Kiln placers, glost, male:								
Group 1.....	5	147	6.5	48.0	7.3	35.72	5.46	.744
Group 2.....	11	92	6.0	40.5	6.7	30.25	5.03	.747
Group 3.....	3	19	11.3	84.1	7.5	71.78	6.37	.863
Group 4.....	5	35	9.0	69.9	7.7	51.82	5.74	.742
Total.....	24	293	7.0	50.6	7.2	38.26	5.48	.756
Gilders and liners, female:								
Group 1.....	5	30	5.5	39.6	7.1	19.89	3.60	.503
Group 2.....	11	105	7.5	51.7	6.9	19.67	2.63	.381
Group 3.....	3	9	10.6	68.3	6.5	27.95	2.65	.409
Group 4.....	4	32	8.6	60.5	7.1	19.78	2.31	.327
Total.....	23	176	7.5	52.1	6.9	20.15	2.68	.387
Transferrers, decalcomania and print, female:								
Group 1.....	6	283	6.3	52.6	8.4	17.31	2.76	.329
Group 2.....	13	295	7.2	58.1	8.0	15.46	2.14	.266
Group 3.....	3	40	8.3	63.5	7.6	15.73	1.89	.248
Group 4.....	5	133	7.8	59.6	7.6	16.48	2.11	.276
Total.....	27	751	7.0	56.6	8.0	16.35	2.33	.289

TABLE 3.—AVERAGE DAYS, HOURS, AND EARNINGS IN EIGHT SPECIFIED OCCUPATIONS IN SEMIVITREOUS WARE AND FOUR IN VITREOUS WARE, 1932, BY GEOGRAPHICAL GROUP—Continued

Kind of ware, occupation, sex, and geographical group	Number of establishments	Number of wage earners	Average number of days worked in 2 weeks	Average hours worked—		Average earnings—		
				In 2 weeks	Per day	In 2 weeks	Per day	Per hour
<i>Vitreous</i>								
Jigger men:								
Group 1.	4	50	4.1	32.6	7.9	\$22.54	\$5.47	\$0.691
Group 2.	3	29	3.9	26.9	6.9	22.79	5.85	.847
Group 3.	5	42	7.4	52.3	7.1	36.85	4.98	.704
Total.	12	121	5.2	38.1	7.3	27.56	5.29	.724
Finishers, female:								
Group 1.	4	33	4.4	32.9	7.5	9.69	2.21	.295
Group 2.	3	43	6.0	42.3	7.1	12.41	2.08	.293
Group 3.	5	26	7.0	44.6	6.4	16.11	2.30	.361
Total.	12	102	5.7	39.8	7.0	12.47	2.18	.313
Kiln placers, bisque, male:								
Group 1.	4	26	4.4	28.4	6.5	20.23	4.61	.711
Group 2.	3	7	7.3	48.1	6.6	39.24	5.39	.816
Group 3.	5	19	7.1	37.2	5.2	32.37	4.56	.870
Total.	12	52	5.8	34.3	5.9	27.22	4.72	.794
Kiln drawers, bisque and glost, male:								
Group 1.	3	23	2.8	18.5	6.6	11.79	4.17	.637
Group 2.	3	23	5.3	42.6	8.0	18.55	3.50	.435
Group 3.	4	23	5.0	27.8	5.6	15.29	3.08	.550
Total.	10	69	4.4	29.6	6.8	15.21	3.49	.513

Wages and Hours of Union Quarry Workers in the United States, January, 1933

QUESTIONNAIRES sent by the Bureau of Labor Statistics in January, 1933, to all local unions of organized quarry workers in the United States resulted in reports of rates of wages and hours of labor in the localities shown in the following table. As near as can be estimated the total number of workers for whom reports were received amounts to about 35 per cent of the total union membership. Data are not available as to the remaining 65 per cent of membership, for which no replies were received.

UNION SCALE OF WAGES AND HOURS REPORTED BY QUARRY WORKERS' INTERNATIONAL UNION OF NORTH AMERICA

Locality and occupation	Date of present agreement	Wage rate per hour		Hours per week	
		At present	Under preceding agreement	At present	Under preceding agreement
Barre, Vt.	Apr. 1, 1931	\$0.75	\$0.85	44	44
Brattleboro, Vt.:					
Quarrymen, drill runners, etc.	do	.62	(1)	40	48
Head derrick men, powder men	do	.67½	(1)	40	48
Engineers	do	.67½- .68½	(1)	40	48
Laborers, helpers, etc.	do	.40 - .50	(1)	40	48
Blacksmiths, machine operators	do	.80 - .90	(1)	40	48
Helpers on sharpening machine	do	.55 - .62	(1)	40	48
Conway Center, N. H.:					
Quarrymen, drill runners	May 23, 1932	.62	.67½	44	(1)
Head derrick men, powder men, etc.	do	.67½	.73	44	(1)
Blacksmiths, machine operators, etc.	do	.76½	.81½	44	(1)
Laborers, helpers, etc.	do	.33½	.55½	44	(1)
Second dago-men, yardmen, etc.	do	.62	.67½	44	(1)
Engineers, skeleton engineers	do	.69¼	.71½- .75	44	(1)
Fitzwilliam, N. H.:					
Quarrymen, drill runners	Apr. 1, 1928	.65	(1)	44	44
Head derrick men, powder men	do	.70	(1)	44	44
Laborers and helpers	do	.52½	(1)	44	44
Engineers	do	.72½- .75	(1)	44	44
Blacksmiths	do	.80	(1)	44	44
Graniteville, Mo.:					
Skilled workers	1932	2 3.50	2 4.50	48	48
Unskilled workers	do	2 2.50	2 3.50	48	48
Graniteville, Vt.	Apr. 1, 1933	.53	.62	45	48
Hall Quarry, Me.:					
Quarrymen, drillers, etc.	Apr. 1, 1928	.57	(1)	44	44
Blacksmiths	do	.77	(1)	44	44
Engineers	do	.59 - .62	(1)	44	44
Laborers and helpers	do	.47	(1)	44	44
Lanesville-Rockport, Mass.:					
Quarrymen	Apr. 1, 1931	.62½	(1)	44	(1)
Drill operators	do	.64½	(1)	44	(1)
Blacksmiths	do	.72½	(1)	44	(1)
Laborers	do	.55	(1)	44	(1)
Merrill, Wis.:					
Drillers, derrick men, engineers, blacksmiths, quarrymen	Apr. 1, 1932	.55	(1)	2 8	2 8
Milford, N. H.	Apr. 1, 1933	.45 - .66	.50½- .73½	44	48
Ortonville, Minn.	October, 1932	.87½	1.00	(1)	(1)
Rockville, Minn.	(1)	.50	.55	44	44
Stonington, Me.:					
Quarrymen and drill runners	Apr. 1, 1932	(3)	.67½	44	44
Firemen, head derrick men	do	(3)	.69½	44	44
Engineers and carpenters	do	(3)	.71½	44	44
Blacksmiths	do	(3)	.80 - .85	44	44
Stevedores	do	(3)	.71½	44	44
Machinists	do	(3)	.86	44	44
Machinists' helpers	do	(3)	.72½	44	44
Sullivan, Me.	May 1, 1928	.62½	.59	48	48
Suncook, N. H.:					
Derrick men, drill runners	Apr. 1, 1931	.65	(1)	45	45
Engineers	do	.67½	(1)	45	45
Blacksmiths	do	1.00	(1)	45	45
Laborers, etc.	do	.50	(1)	45	45
Tenants Harbor, Me.:					
Derrick men, etc.	February, 1931	.52½	.57	(1)	44
Blacksmiths	do	.70	.77	(1)	44
Engineers	do	.53 - .56	.59 - .62	(1)	44
Laborers, etc.	do	.42	.47	(1)	44
Thomaston, Me.	Apr. 1, 1933	.51	.57	44	44
Westerly, R. I.:					
Quarrymen	Apr. 1, 1932	.58	(1)*	2 8	2 8
Lumpers, powder men, etc.	do	.63	(1)	2 8	2 8
Laborers and helpers	do	.48	(1)	2 8	2 8
Firemen	do	.58	(1)	2 8	2 8
Engineers	do	.62 - .63	(1)	2 8	2 8
West Quincy, Mass.:					
Quarrymen, drill runners	May 4, 1928	.68	(1)	24	45
Blacksmiths, sharpening-machine operators	do	.82 - .92	(1)	24	45
Wilkeson, Wash.	Mar. 1, 1932	2 5.50	2 6.50	(1)	48

¹ Not reported.² Per day.³ 10 per cent reduction.

Wage-Rate Changes in American Industries

Manufacturing Industries

IN THE following table is presented information concerning wage-rate adjustments occurring between January 15, 1933, and February 15, 1933, as shown by reports received from manufacturing establishments supplying employment data to this Bureau. Of the 17,773 manufacturing establishments included in the February survey, 17,218 establishments, or 96.9 percent of the total, reported no change in wage rates over the month interval. The 2,529,943 employees not affected by changes in wage rates constituted 97.5 percent of the total number of employees covered by the February trend-of-employment survey of manufacturing industries.

Decreases in wage rates were reported by 552 establishments in 71 of the 89 industries surveyed. These establishments represented 3.1 percent of the total number of establishments covered. The wage-rate decreases reported averaged 11.5 percent and affected 62,178 employees, or 2.4 percent of all employees in the establishments reporting.

Three establishments in three industries reported wage-rate increases in February, averaging 17.9 percent, and affecting 1,551 employees.

TABLE 1.—WAGE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING FEBRUARY 15, 1933

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
All manufacturing industries.....	17,773	2,593,672	17,218	3	552	2,529,943	1,551	62,178
Percent of total.....	100.0	100.0	96.9	(1)	3.1	97.5	0.1	2.4
Food and kindred products:								
Baking.....	955	60,216	932	—	23	58,626	—	1,590
Beverages.....	317	9,210	311	—	6	8,751	—	459
Butter.....	289	4,867	281	—	8	4,349	—	518
Confectionery.....	315	33,712	304	—	11	31,354	—	2,358
Flour.....	424	15,650	400	—	24	14,766	—	884
Ice cream.....	381	10,636	375	—	6	10,400	—	236
Slaughtering and meat packing.....	241	86,641	230	—	11	85,124	—	1,517
Sugar, beet.....	59	4,348	59	—	—	4,348	—	—
Sugar refining, cane.....	15	7,891	15	—	—	7,891	—	—
Textiles and their products:								
Fabrics:								
Carpets and rugs.....	32	12,973	32	—	—	12,973	—	—
Cotton goods.....	673	230,848	659	—	14	226,307	—	4,541
Cotton small wares.....	113	9,394	110	—	3	9,101	—	293
Dyeing and finishing textiles.....	150	34,315	146	—	4	34,147	—	168
Knit goods.....	448	100,650	432	—	16	95,933	—	4,717
Silk and rayon goods.....	242	45,021	236	1	5	42,586	25	2,410
Woolen and worsted goods.....	239	58,953	224	—	15	55,389	—	3,564
Wearing apparel:								
Clothing, men's.....	368	61,908	365	—	3	61,825	—	83
Clothing, women's.....	440	27,481	436	—	4	27,101	—	380
Corsets and allied garments.....	33	5,837	32	—	1	5,574	—	263
Hats, fur-felt.....	35	5,387	35	—	—	5,387	—	—
Men's furnishings.....	68	7,288	64	—	4	7,175	—	113
Millinery.....	121	9,403	119	—	2	9,350	—	53
Shirts and collars.....	116	14,837	114	—	2	14,709	—	128

¹ Less than one tenth of 1 percent.

TABLE 1.—WAGE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING FEBRUARY 15, 1933—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Iron and steel and their products, not including machinery:								
Bolts, nuts, washers, and rivets	67	7,494	64	—	3	7,216	—	278
Cast-iron pipe	39	4,463	39	—	—	4,463	—	—
Cutlery (not including silver, and plated cutlery) and edge tools	121	7,873	119	—	2	7,664	—	209
Forgings, iron and steel	60	4,904	57	—	3	4,559	—	345
Hardware	100	20,411	95	—	5	19,787	—	624
Iron and steel	199	177,531	194	—	5	175,778	—	1,753
Plumbers' supplies	68	5,910	65	—	3	5,778	—	132
Steam and hot-water heating apparatus and steam fittings	97	13,441	94	—	3	13,315	—	126
Stoves	154	13,533	145	1	8	12,759	14	760
Structural and ornamental metal work	194	13,032	189	—	5	12,954	—	78
Tin cans and other tinware	60	8,215	59	—	1	8,179	—	36
Tools (not including edge tools, machine tools, files, and saws)	125	6,539	118	—	7	5,797	—	742
Wirework	64	4,843	62	—	2	4,815	—	28
Machinery, not including transportation equipment:								
Agricultural implements	79	7,583	77	—	2	7,573	—	10
Cash registers, adding machines, and calculating machines	40	12,733	39	—	1	11,975	—	758
Electrical machinery, apparatus, and supplies	293	99,211	280	—	13	97,585	—	1,626
Engines, turbines, tractors, and water wheels	90	14,930	84	—	6	14,746	—	184
Foundry and machine-shop products	1,060	94,453	1,009	—	51	90,893	—	3,560
Machine tools	145	10,410	143	—	2	10,402	—	8
Radios and phonographs	39	15,488	39	—	—	15,488	—	—
Textile machinery and parts	43	6,697	42	—	1	6,690	—	7
Typewriters and supplies	16	8,288	16	—	—	8,288	—	—
Nonferrous metals and their parts:								
Aluminum manufactures	24	4,881	23	—	1	4,703	—	178
Brass, bronze, and copper products	200	25,357	198	—	2	25,309	—	48
Clocks and watches and time-recording devices	23	4,477	23	—	—	4,477	—	—
Jewelry	139	6,841	135	—	4	6,696	—	145
Lighting equipment	54	2,698	53	—	1	2,681	—	7
Silverware and plated ware	53	7,290	52	—	1	7,161	—	129
Smelting and refining—copper, lead, and zinc	30	8,015	28	—	2	7,613	—	402
Stamped and enameled ware	84	12,333	77	—	7	11,321	—	1,012
Transportation equipment:								
Aircraft	29	5,884	29	—	—	5,884	—	—
Automobiles	242	192,021	234	1	7	189,687	1,512	822
Cars, electric and steam railroad	41	4,745	41	—	—	4,745	—	—
Locomotives	14	2,098	14	—	—	2,098	—	—
Shipbuilding	98	23,195	97	—	1	22,789	—	406
Railroad repair shops:								
Electric railroad	405	20,728	400	—	5	20,103	—	625
Steam railroad	509	69,737	494	—	15	67,053	—	2,684
Lumber and allied products:								
Furniture	442	39,770	416	—	26	37,593	—	2,177
Lumber:								
Millwork	458	16,672	435	—	23	15,604	—	1,068
Sawmills	593	50,138	575	—	18	46,722	—	3,416
Turpentine and rosin	21	957	21	—	—	957	—	—

TABLE 1.—WAGE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING FEBRUARY 15, 1933—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Stone, clay, and glass products:								
Brick, tile, and terra cotta	665	13,192	656	—	9	12,640	—	552
Cement	114	9,633	107	—	7	8,826	—	807
Glass	188	32,980	181	—	7	32,660	—	320
Marble, granite, slate, and other products	217	4,357	210	—	7	4,053	—	304
Pottery	121	14,355	117	—	4	14,013	—	342
Leather and its manufactures:								
Boots and shoes	322	108,806	317	—	5	107,955	—	851
Leather	157	25,050	153	—	4	24,120	—	921
Paper and printing:								
Boxes, paper	305	19,576	294	—	11	19,076	—	500
Paper and pulp	402	76,195	379	—	23	73,041	—	3,154
Printing and publishing:								
Book and job	743	47,367	725	—	18	46,022	—	1,345
Newspapers and periodicals	448	63,407	428	—	20	62,159	—	1,248
Chemicals and allied products:								
Chemicals	117	20,837	112	—	5	20,663	—	174
Cottonseed, oil, cake, and meal	54	2,494	54	—	—	2,494	—	—
Druggists' preparations	39	6,534	39	—	—	6,534	—	—
Explosives	25	3,054	25	—	—	3,054	—	—
Fertilizers	206	7,991	202	—	4	7,822	—	169
Paints and varnishes	344	13,324	332	—	12	12,921	—	403
Petroleum refining	113	45,523	112	—	1	44,693	—	830
Rayon and allied products	23	29,173	23	—	—	29,173	—	—
Soap	87	14,279	83	—	4	13,810	—	469
Rubber products:								
Rubber boots and shoes	9	9,388	9	—	—	9,388	—	—
Rubber goods, other than boots, shoes, tires, and inner tubes	97	18,313	94	—	3	18,088	—	225
Rubber tires and inner tubes	45	42,899	43	—	2	42,543	—	356
Tobacco manufactures:								
Chewing and smoking tobacco and snuff	34	10,323	34	—	—	10,323	—	550
Cigars and cigarettes	212	41,347	204	—	8	40,797	—	—

Nonmanufacturing Industries

DATA concerning wage-rate changes occurring between January 15, 1933, and February 15, 1933, in 14 groups of nonmanufacturing industries are presented in the following table.

No changes in wage rates were reported in the anthracite mining group. In the remaining 13 groups decreases in wage rates were reported over the month interval. The average percents of decrease in rates reported in each of the several groups were as follows: Hotels, 5.8 percent; power and light, 7.3 percent; electric railroad and motor-bus operation, 7.7 percent; metalliferous mining, 8 percent; quarrying and nonmetallic mining, 8.1 percent; canning and preserving, 8.8 percent; laundries, 9.9 percent; telephone and telegraph, 10 percent; dyeing and cleaning, 10.7 percent; wholesale trade, 11.7 percent; retail trade, 11.9 percent; bituminous-coal mining, 13.2 percent and crude-petroleum producing, 17.5 percent.

TABLE 2.—WAGE CHANGES IN NONMANUFACTURING INDUSTRIES DURING MONTH ENDING FEBRUARY 15, 1933

Industrial group	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Anthracite mining	160	80,390	160			80,390		
Percent of total	100.0	100.0	100.0			100.0		
Bituminous-coal mining	1,283	179,810	1,201		82	164,662		15,148
Percent of total	100.0	100.0	93.6		6.4	91.6		8.4
Metalliferous mining	267	21,229	265		2	21,144		85
Percent of total	100.0	100.0	99.3		.7	99.6		.4
Quarrying and nonmetallic mining	605	16,138	594		11	15,350		788
Percent of total	100.0	100.0	98.2		1.8	95.1		4.9
Crude petroleum producing	255	23,858	249		6	23,781		77
Percent of total	100.0	100.0	97.6		2.4	99.7		.3
Telephone and telegraph	8,325	282,201	8,287		38	281,418		783
Percent of total	100.0	100.0	99.5		.5	99.7		.3
Power and light	3,342	204,929	3,312		30	201,628		3,301
Percent of total	100.0	100.0	99.1		.9	98.4		1.6
Electric-railroad and motor-bus operation and maintenance	548	133,915	539		9	130,085		3,830
Percent of total	100.0	100.0	98.4		1.6	97.1		2.9
Wholesale trade	2,779	73,580	2,715		64	72,351		1,229
Percent of total	100.0	100.0	97.7		2.3	98.3		1.7
Retail trade	14,863	316,377	13,715		1,148	310,429		5,948
Percent of total	100.0	100.0	92.3		7.7	98.1		1.9
Hotels	2,544	131,683	2,528		16	130,117		1,566
Percent of total	100.0	100.0	99.4		.6	98.8		1.2
Canning and preserving	843	32,262	835		8	32,118		144
Percent of total	100.0	100.0	99.1		.9	99.6		.4
Laundries	926	53,318	897		29	51,313		2,005
Percent of total	100.0	100.0	96.9		3.1	96.2		3.8
Dyeing and cleaning	318	9,045	304		14	8,298		747
Percent of total	100.0	100.0	95.6		4.4	91.7		8.3

Wage Changes Reported by Trade-Unions and Municipalities Since December, 1932

WAGE and hour changes occurring in trade-union agreements and reduced rates adopted by municipalities which were reported to the bureau during the past month are shown in the table following. The tabulation covers a total of 35,558 workers, of whom 472 were reported to have gone on the 5-day week.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY,
DECEMBER, 1932, TO MARCH, 1933

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Bakers, Detroit, Mich.	Dec. 17	Per week \$60.00	Per week \$50.00	45	45
Building trades:					
Carpenters, Rochester, N. Y., and vicinity	Jan. 16	Per hour 1.00	Per hour .90	40	40
Cement finishers—					
Duluth, Minn., and vicinity	Jan. 1	1.25	1.00	40	40
Santa Barbara, Calif.	Jan. 9	1.06 $\frac{1}{4}$	.81 $\frac{1}{4}$	(1)	(1)
Hod carriers and laborers—Cement and concrete laborers, Hudson County, N. J.	Feb. 1	1.25	1.00	28	28
Lathers, Santa Barbara, Calif.	Jan. 9	1.18 $\frac{3}{4}$	.93 $\frac{3}{4}$	(1)	(1)
Painters, paperhangers, and decorators—					
Rochester, N. Y.	Feb. 20	1.00	.90	40	40
Santa Barbara, Calif.	Jan. 9	1.00	.75	(1)	(1)
Plasterers—					
Duluth, Minn., and vicinity	Jan. 1	1.25	1.00	40	40
Santa Barbara, Calif.	Jan. 9	1.31 $\frac{1}{4}$	1.06 $\frac{1}{4}$	(1)	(1)
Roofers, Santa Barbara, Calif.	do	.96 $\frac{7}{8}$	.71 $\frac{7}{8}$	(1)	(1)
Chauffeurs and teamsters, funeral-car drivers, Chicago, Ill.	Feb. 6	Per week 42.00	Per week 36.00	(1)	(1)
Hotel and restaurant workers, Astoria, Oreg.:					
Dinner cooks	Jan. 17	Per day 6.00	Per day 5.10	48	48
Fry and second cooks	do	5.00	4.25	48	48
Combination cooks and helpers	do	4.00	3.40	48	48
Women cooks	do	4.50	3.83	48	48
Lunch-counter men	do	4.75	4.04	48	48
Waiters	do	3.25	2.76	48	48
Waitresses	do	2.75	2.34	48	48
Dishwashers	do	2.75	2.34	48	48
Printing and publishing:					
Oakland, Calif.—					
Job work, day	Jan. 1	Per week 52.00	Per week 49.00	44	40
Job work, night	do	55.50	52.50	44	40
Pittsburgh, Pa.—					
Job work, day	Jan. 14	50.00	42.24	44	44
Job work, night	do	53.00	45.32	44	44
Newspaper, day	Jan. 18	58.00	43.37	45	37 $\frac{1}{2}$
Newspaper, night	do	61.00	45.88	45	37 $\frac{1}{2}$
Sacramento, Calif.—					
Job work, day	Jan. 1	52.00	49.00	44	40
Job work, night	do	55.50	52.50	44	40
San Francisco, Calif.—					
Job work, day	do	52.00	49.00	44	40
Job work, night	do	55.50	52.50	44	40
Street railway workers:					
Detroit, Mich., motormen, conductors, and bus operators	do	Per hour .75	Per hour .67 $\frac{1}{2}$	40	40
Jackson and Lansing, Mich.	Dec. 22	.41	.32	52	52
Municipal workers:					
Beaver County, Pa., employees receiving over \$100 per month	Jan. 1	(1)	(1)	(1)	(1)
Beverly, Mass., firemen and policemen	do	Per week 38.50	Per week 35.00	(1)	(1)
Coatesville, Pa.—					
Policemen	Jan. 4	Per hour .50	Per hour .45	28	28
Other employees	do	(1)	(1)	28	28
Corey, Pa.—					
Chief of police	Feb. 1	1,800	1,620	(1)	(1)
Police patrolmen	do	1,500	1,350	(1)	(1)
Fire truck drivers first ward	do	1,440	1,296	(1)	(1)
Fire truck drivers Station No. 2	do	1,260	1,134	(1)	(1)
Street commissioner	do	1,620	1,458	(1)	(1)
Laborers	do	Per hour .40	Per hour .30	(1)	(1)
Other employees	do	(1)	(1)	(1)	(1)

¹ Not reported.² Hours per day.³ 5 per cent reduction.⁴ 10 per cent reduction.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY,
DECEMBER, 1932, TO MARCH, 1933—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Municipal workers—Continued.					
Dormont, Pa., clerks, police, laborers, and park employees	Mar. 1	Per hour (¹)	Per hour (¹)	54	54
Glassport, Pa.—		Per day	Per day		
Policemen	Jan. 1	\$5.00	\$4.05	(¹)	(¹)
Street men	do	4.00	3.60	(¹)	(¹)
Truck drivers	do	5.60	5.10	(¹)	(¹)
Janitors	do	4.00	3.60	(¹)	(¹)
Knoxville, Tenn.—		Per month	Per month		
Police department—					
Detectives	do	⁶ 166-200	150-180	(¹)	(¹)
Officers	do	⁶ 127-186	115-168	(¹)	(¹)
Fire department—					
Chief	do	⁶ 285	257	(¹)	(¹)
Assistants	do	⁶ 170-220	153-198	(¹)	(¹)
Firemen	do	⁶ 127-169	115-152	(¹)	(¹)
Other employees	do	(¹)	(¹)	(¹)	(¹)
New York, N. Y.	do	(¹)	(⁷)	(¹)	(¹)
Rockford, Ill., police and firemen	do	(¹)	(⁸)	(¹)	(¹)
Williamsport, Pa., employees receiving over \$1,200 per year	do	(¹)	(⁹)	(¹)	(¹)

¹ Not reported.⁴ 10 per cent reduction.⁸ Average.⁶ Estimated.⁷ See text following.⁸ 15 per cent reduction.

The reductions in the compensation of New York City government employees effective January 1, 1933, are as follows:

Group 1. Officers or persons receiving a rate of compensation of \$2,000 a year, but not exceeding \$3,000—6 per cent of the compensation not in excess of \$2,000; 7 per cent of the compensation in excess of \$2,000, but not in excess of \$3,000.

Group 2. Officers or persons receiving a rate of compensation of \$3,000 a year, but not in excess of \$4,000—The same reduction as officers or persons in Group 1 and in addition 8 per cent of the compensation in excess of \$3,000, but not in excess of \$4,000.

Group 3. Officers or persons receiving a rate of compensation of \$4,000 a year, but not in excess of \$5,000—The same reduction as officers or persons in Group 2 and in addition 9 per cent of the compensation in excess of \$4,000, but not in excess of \$5,000.

Group 4. Officers or persons receiving a compensation of \$5,000 a year, but not in excess of \$10,000—The same reduction as officers or persons in Group 3 and in addition 10 per cent of the compensation in excess of \$5,000, but not in excess of \$10,000.

Group 5. Officers or persons receiving a compensation of \$10,000 a year, but not in excess of \$15,000—The same reduction as officers or persons in Group 4 and in addition 15 per cent of the compensation in excess of \$10,000, but not in excess of \$15,000.

Group 6. Officers or persons receiving a compensation in excess of \$15,000—The same reduction as officers or persons in Group 5 and in addition 33 $\frac{1}{10}$ per cent of the compensation in excess of \$15,000. Provided that in making such reductions, the compensation of an officer or person shall not be reduced in such a manner that his compensation for the year 1933 shall be less than \$2,000 and provided further that if the above reductions result in a rate of compensation for the year 1933 which is not a direct multiple of \$5, then the rate of compensation shall be fixed at the next lower direct multiple of \$5.

Average Weekly Earnings in New York State Factories, June, 1914, to January, 1933

THE average weekly earnings of office and shop employees in representative factories in New York State from June, 1914, to January, 1933, are shown, by month, in the following table taken from the February, 1933, issue of the Industrial Bulletin of the State department of labor.

**AVERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE
FACTORIES**

[Includes all employees in both office and shop. The average weekly earnings are obtained by dividing the total weekly pay roll by the total number of employees on the pay roll for the given week. Reports cover the week including the 15th of the month]

General Trend of Wages in Great Britain Since 1924¹

WAGE rates in Great Britain have shown a marked rigidity during the period of falling prices since 1924. The Ministry of Labor's index of wage rates, based on 1924 as 100, had fallen only to 97 by the third quarter of 1931, while the cost of living index had fallen to 83.1 and wholesale prices (Board of Trade's index) to 60.3 during the same period. After the suspension of the gold standard on September 21, 1931, when a rise in sterling prices and in the cost of living was widely expected, the former appears merely to have been arrested in its fall, while the latter continued downward. The index of wage rates dropped from 97 for the third quarter of 1931 to 96 in the first quarter of 1932, and has remained at 96 up to the present.

If, however, from the international point of view the fall in the value of the pound sterling is taken into account, there has been a sharp drop in the general level of wages in Great Britain, as compared with countries remaining on the gold standard.

On the other hand, from the point of view of the worker, the rates of wages which he receives have dropped only very slightly, and because of the continued fall in the cost of living his real wages have actually increased. This is shown in the following table:

TABLE 1.—INDEX NUMBERS OF WEEKLY WAGE RATES, REAL WAGES, COST OF LIVING, AND WHOLESALE PRICES IN THE UNITED KINGDOM, 1924 TO 1932

[Average 1924 = 100.0]

Period	Rates of wages	Real wages	Cost of living	Wholesale prices
Third quarter of—				
1924	100.5	102.2	98.3	99.3
1925	102.0	102.6	99.4	93.9
1926	101.5	103.7	97.9	90.2
1927	101.0	106.9	94.5	85.3
1928	100.0	105.8	94.5	83.8
1929	99.5	106.5	93.4	82.1
1930	99.0	110.6	89.5	70.7
1931	97.0	116.7	83.1	60.3
1932	96.0	118.5	81.0	60.0

It should not be forgotten that the advantageous position shown above is true only for the fortunate worker who is employed full time. From the point of view of actual earnings, account should be taken of the amount of short time, to say nothing of the average spell of unemployment during the year. For this reason figures are given in the following pages of actual earnings, when they are available, as well as of wage rates.

Important Recent Changes in Wage Rates

Sliding Scale Rates

THE majority of changes in wage rates which have occurred since 1929 have been in trades for which there are agreements of sliding scale rates based on changes in the cost of living, or on changes in the selling prices of the products of the industry. The more important industries covered by the first type of sliding scale arrangements are building, silk manufacture, furniture trades, paper making, textile

¹ This report was prepared, late in 1932, by K. A. H. Egerton, of the American consulate general, London, with the assistance of the United States consuls at Belfast, Birmingham, Bradford, Cardiff, and Manchester.

bleaching, dyeing and finishing, and calico printing. Sliding-scale rates based on selling prices are operative in some of the metal and engineering industries. Since 1929 all of these have tended to show a downward movement, as the cost of living has fallen almost steadily throughout 1930, 1931, and 1932, while selling prices have slumped heavily throughout the period.

Important New Wage Agreements

Important changes in wage agreements during the period since 1929 have occurred in the cotton and wool textile industries, and in the pottery industry. There was a reduction of about 10 per cent in the wages of operatives in the wool textile industry in 1930, and a further reduction of 11.5 per cent in 1931; a drop of about 8.5 per cent and 7.75 per cent in the wages of cotton weavers and spinners, respectively, in 1932, and a reduction of 10 per cent in the wages of pottery workers in 1931. Wage reductions were not very important in 1930, but in 1931 engineers, shipbuilders, linen workers, boot and shoe operatives, and coal miners in two districts, namely, Scotland and South Wales, were all affected by wage rate reductions.

While the above-mentioned industries do not constitute by any means a complete list, they are the more important trades in which wage rates have recently been reduced.

Actual Earnings as Affected by Short Time

APART from reductions in wage rates since 1929, the increased use of short time worked in many factories, mines, and other establishments has had a marked effect on the actual earnings of wage earners. This is shown specifically in the case of coal mining and some other industries in the pages which follow. It would be impossible, however, to estimate the average reduction in earnings of workers employed resulting from short time since the onset of the acute depression which began in the autumn of 1929. It has been estimated wherever possible in this report, but figures are available in only a limited number of industries.

Factors Affecting Cash Value of Wages

A NUMBER of factors may make the worker's cash earnings either greater or less than the nominal wage rate, such items as payment for overtime, allowances in kind, paid holidays, and the like adding to his returns, while wage taxes, deductions for insurance, and so on, would decrease his receipts. Overtime rates, allowances and holidays, have in general been dealt with in the preceding pages under the particular trades affected. Wage taxes are unknown in Great Britain, apart from the general income tax, which, owing to the provisions for exemption, affects only a small proportion of the wage earners. Insurance deductions, however, form an appreciable item in the worker's calculations.

Insurance Contributions

The workers' nominal wages are diminished by weekly contributions to the national unemployment insurance scheme, the health insurance scheme, and the widows' and old-age pension schemes. Agricultural workers, domestic servants, most railway employees, and employees of local Government authorities are not covered by the unemployment insurance scheme, but for other workers the employer

deducts the weekly contribution from the wage before paying it over. He also makes, on his own account, a contribution of the same or slightly larger amount, which from his point of view may be regarded as an addition to the wage. Table 2 shows the weekly contribution made by the employer and the employee to these three schemes, but does not include the amount contributed by the Government, which bears a part of the cost.

TABLE 2.—CONTRIBUTIONS PAYABLE BY EMPLOYER AND EMPLOYEE FOR HEALTH, UNEMPLOYMENT, AND PENSIONS INSURANCE, BY CLASS OF WORKER

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Class of worker	Health insurance			Pensions insurance			Unemployment insurance		
	Employer	Employee	Total	Employer	Employee	Total	Employer	Employee	Total
Normal rates (persons between 21 and 65 years):									
Men	d. 4½	d. 4½	d. 9	d. 4½	d. 4½	d. 9	d. 10	d. 10	s. 1 8
Women	d. 4½	d. 4	d. 8½	d. 2½	d. 2	d. 4½	d. 9	d. 9	s. 1 6
Persons over 65 years:									
Men				9		9	10		10
Women				7		7	9		9
Young men and young women (18 to 21 years):									
Young men	d. 4½	d. 4½	d. 9	d. 4½	d. 4½	d. 9	d. 9	d. 9	s. 1 6
Young women	d. 4½	d. 4	d. 8½	d. 2½	d. 2	d. 4½	d. 8	d. 8	s. 1 4
Juveniles (16 to 18 years):									
Boys	d. 4½	d. 4½	d. 9	d. 4½	d. 4½	d. 9	d. 5	d. 5	10
Girls	d. 4½	d. 4	d. 8½	d. 2½	d. 2	d. 4½	d. 4½	d. 4½	9
Low-wage earners over 21 years:									
Earnings 3s. per day or less—									
Men	9		9	d. 4½	d. 4½	d. 9	10	10	s. 1 8
Women	8½		8½	d. 2½	d. 2	d. 4½	9	9	s. 1 6
Earnings over 3s. but not more than 4s. per day—									
Men	5½	3½	9	d. 4½	d. 4½	d. 9	10	10	s. 1 8
Women	5½	3	8½	d. 2½	d. 2	d. 4½	9	9	s. 1 6
Low-wage earners between 18 and 21 years:									
Earning 3s. per day or less—									
Young men	9		9	d. 4½	d. 4½	d. 9	9	9	s. 1 6
Young women	8½		8½	d. 2½	d. 2	d. 4½	8	8	s. 1 4
Earning over 3s. but not more than 4s. per day—									
Young men	5½	3½	9	d. 4½	d. 4½	d. 9	9	9	s. 1 6
Young women	5½	3	8½	d. 2½	d. 2	d. 4½	8	8	s. 1 4

It will be seen that each normal male worker between 21 and 65 years of age contributes 19d. (1s. 7d. [at par, 38.5 cents; at exchange rate, 26.0 cents])² weekly for insurance purposes, and that his employer contributes the same amount, making a total of 38d. (3s. 2d. [at par, 77.1 cents; at exchange rate, 51.9 cents]) paid in weekly to the insurance funds so long as the man is at work. For workers in other categories the totals contributed are smaller, as shown in the above table.

Minimum Rates of Wages

THE most general information on wages in Great Britain is found in the tables published by the Ministry of Labor in the Twentieth Abstract of Labor Statistics. These have been revised making the figures as of September 30, 1932, and from them Tables 3 and

² At par shilling=24.33 cents, penny=2.03 cents; at average exchange rate for December, 1932, shilling=16.4 cents, penny=1.37 cents.

4 have been prepared, giving the minimum time rates of wages per week, per day, or per hour. These minima have been determined by agreements between organizations of employers and workers; by arbitration awards, or, in the absence of such agreements or awards, by certain trade-unions which have recognized these rates as the minima for their members.

TABLE 3.—MINIMUM WEEKLY RATES OF WAGES AND HOURS OF LABOR IN LONDON AND GLASGOW IN SPECIFIED OCCUPATIONS, SEPTEMBER 30, 1932

[Except where otherwise indicated rates and hours are those recognized by employers' associations and trade-unions concerned. Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Industry and occupation	London			Glasgow			Full-time hours per week	
	British currency	United States currency		British currency	United States currency			
		At par	At exchange rate		At par	At exchange rate		
Engineering:								
Fitters and turners	62 11	\$15.31	\$10.32	58 1	\$14.13	\$9.53	47	
Iron molders (sand)	62 11	15.31	16.32	64 10½	15.78	10.64	47	
Laborers	45 3½	11.02	7.43	42 4½	10.31	6.95	47	
Electrical installation: Wiremen, etc.	1 21¾	.44	.30	1 18½	.38	.25	47	
Vehicle building: Skilled men	1 17½	.36	.24	1 17	.35	.23	47	
Shipbuilding and repairing:								
Shipwrights—								
New work				60 0	14.60	9.84	47	
Repairing	66 6	16.18	10.91	62 3	15.15	10.21	2 47	
Ship joiners—								
New work				60 0	14.60	9.84	47	
Repair work	66 6	16.18	10.91	62 0	15.08	10.17	2 47	
Laborers	51 6	12.53	8.45	41 0	9.98	6.72	2 47	
Flour milling:								
First roller men	73 0	17.76	11.97				3 47	
Laborers	57 0	13.87	9.35				3 47	
Baking:								
Forehands	48-76 0	16.54-18.49	11.15-12.46				44-48	
Table hands	46 0	14.60	9.84	75-77 0	18.25-18.73	12.30-12.63	44-48	
Furniture:								
Cabinetmakers	1 19	.39	.26	1 18½	.38	.25	44-47	
Upholsterers	1 19	.39	.26	1 18½	.38	.25	44-47	
Printing and bookbinding:								
Hand compositors, book and job	89 0	21.65	14.60	77 6	18.86	12.71	48	
Bookbinders and machine rulers	80 0	19.46	13.12	77 6	18.86	12.71	48	
General assistants, book and job				53 6	13.02	8.77	5 48	
Building:								
Craftsmen (other than painters)	6 19½	.40	.27	7 18½	.38	.25	8 44	
Painters	6 18½	.38	.25	7 19	.39	.26	8 44	
Laborers	6 14¾	.30	.20	7 14	.28	.19	8 44	
Street railways:								
Motormen ⁹	63-72 0	15.33-17.52	10.33-11.81	54-62 0	13.14-15.08	8.86-10.17	48	
Conductors ⁹	63-72 0	15.33-17.52	10.33-11.81	54-62 0	13.14-15.08	8.86-10.17	48	

¹ Per hour.

² London, 45.

³ For day workers; shift workers, 44.

⁴ The rates quoted apply to members of the London Master Bakers' and Confectioners' Protective Society; the rates applicable to cooperative societies and certain firms are 5s. higher.

⁵ The rate quoted for Glasgow is payable for a week of 42 hours. A rate 5s. higher is payable when the hours are over 42 and up to 48.

⁶ Per hour. For an area within 12 miles radius of Charing Cross. For the area between 12 and 15 miles radius from Charing Cross the rate is ½d. per hour less, except that the rate usually paid to plasterers is 20½d.

⁷ Per hour. Plasterers, 19½d. and bricklayers 19d. per hour.

⁸ 46½ during the period of statutory summer time.

⁹ The lower rates given are the starting rates, the higher those payable after a certain length of service.

TABLE 4.—RATES OF WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS,
SEPTEMBER 30, 1932

[Conversions into United States currency on basis of par value of pound=\$4.8665, shilling=24.33 cents, penny=2.03 cents; exchange rate for December, 1932, of pound=\$3.28, shilling=16.4 cents, penny=1.37 cents]

Industry and occupation	British currency	United States currency	
		At par	At exchange rate
Boot and shoe manufacture (minimum weekly rates):			
Male workers—	£ s. d.		
21 years	48 6	\$11.80	\$7.95
21½ years	51 0	12.41	8.36
22 years	54 0	13.14	8.86
Female workers—			
18 years	23 0	5.60	3.77
18½ years	25 9	6.27	4.22
19 years	28 6	6.93	4.67
19½ years	31 0	7.54	5.08
20 years	33 0	8.03	5.41
Paper manufacture (minimum hourly rates):			
Machine men and beater men—			
North and south of England	1 5	.34	.23
West of England, Wales and Scotland	1 4	.32	.22
Laborers, etc., shift work—			
North and south of England	1 1	.26	.18
West of England, Wales and Scotland	1 0	.24	.16
Laborers, etc., day work—			
North and south of England	0 11½	.24	.16
West of England, Wales and Scotland	0 10½	.22	.15
Women—			
North and south of England	0 67½	.14	.09
West of England, Wales and Scotland	0 63½	.13	.09
Merchant shipping service (standard monthly rates): ¹			
Able seamen, sailors, seamen or deck hands	8 2 0	39.41	26.57
Firemen	8 12 0	41.85	28.21
Ordinary seamen—			
12 to 24 months' service	4 1 0	19.71	13.28
24 months' service and over	5 5 6	25.67	17.30
Trimmers	8 2 0	39.41	26.57
Railway service (standard rates per week including bonus under sliding scale):			
Porters, grade 1—			
London	44 8	10.87	7.33
Industrial areas	44 8	10.87	7.33
Rural areas	44 8	10.87	7.33
Porters, grade 2—			
London	40 11	3.96	6.71
Industrial areas	40 0	9.73	6.56
Rural areas	40 0	9.73	6.56
Goods porters—			
London	45 8	11.11	7.49
Industrial areas	42 10	10.42	7.03
Rural areas	40 0	9.73	6.56
Goods checkers—			
London	55 2	13.42	9.05
Industrial areas	52 4	12.73	8.58
Rural areas	45 8	11.11	7.49
Carters—			
London	51 4	12.49	8.42
Industrial areas	48 6	11.80	7.95
Rural areas	44 8	10.87	7.33
Permanent-way gangers—			
London	58 0	14.11	9.51
Industrial areas	62 9	15.27	10.29
Rural areas	50 5	12.27	8.27
Permanent-way undermen—			
London	46 7	11.33	7.64
Industrial areas	48 6	11.80	7.95
Rural areas	42 10	10.42	7.03
Ticket collectors (class 1)	40 11	9.96	6.71
Ticket collectors (class 2)	52 4	12.73	8.58
Guards (passenger and freight)—			
First and second years	48 6	11.80	7.95
Third and fourth years	53 3	12.96	8.73
Fifth year	58	14.11	9.51
Sixth year	62	15.27	10.29

¹ With free food in addition.

² For new entrants since February, 1926, the rate is 40s.

TABLE 4.—RATES OF WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS,
SEPTEMBER 30, 1932—Continued

Industry and occupation	British currency	United States currency	
		At par	At exchange rate
Railway service (standard rates per week including bonus under sliding scale)—Continued.			
Shunters (passenger and freight)—	£ s. d.		
Class 1	62 9	\$15.27	\$10.29
Class 2	58 0	14.11	9.51
Class 3	53 3	12.96	8.73
Class 4	48 6	11.80	7.95
Engine drivers ³ —			
First and second years	69 5	16.89	11.38
Third and fourth years	75 1	18.27	12.31
Fifth year	80 10	19.67	13.26
Sixth year	86 6	21.05	14.19
Firemen ³ —			
First and second years	55 2	13.42	9.05
Third and fourth years	60 10	14.80	9.98
Fifth to tenth year	63 8	15.49	10.44
Eleventh year	69 5	16.89	11.38
Station foremen—			
Class 1	62 9	15.27	10.29
Class 2	56 1	13.65	9.20
Yard foremen—			
Class 1	72 3	17.58	11.85
Class 2	67 6	16.42	11.07
Dock labor (minimum rates per day):			
Ordinary laborers—			
Larger ports	11 2	2.72	1.83
Smaller ports	10 2	2.47	1.67
Intermediate ports	{ 10 2	2.47	1.67
	11 2	2.72	1.83

³ Where the mileage during any turn of duty worked on the mileage basis exceeds 140 miles, extra payment is made.

Trade Board Wage Rates

In a number of the minor industries and trades, such as the preparation of aerated waters, chain making, the manufacture of brushes and brooms, the hat, cap, and millinery trades, and so on, minimum rates of wages are fixed for adult male and female workers by trades boards, and in these rates there have been few changes since 1929.

Wage Rates and Earnings in Certain Important Industries

WHILE the foregoing tables give minimum wage rates in a number of industries, they do not show actual earnings. An attempt has been made, therefore, to obtain information for a number of important industries in greater detail, and where possible to secure also figures of actual earnings, taking into account short time. Where this has not been possible, figures of actual full-time rates have been sought. These details have been furnished largely by American consular officers in the United Kingdom, and are given below.

Coal Mining

Hours of work.—Hours of work underground were fixed by the coal mines act of 1930 at seven and one-half per shift, with a proviso for the so-called "spread over," under which a different arrangement of hours might be made provided the working time did not exceed 90 hours in a fortnight. This act was due to expire July 8, 1931, but before that date the coal mines act of 1931 was passed, which continued in effect the 7½-hour shift, but no longer permitted the spread over. (See Monthly Labor Review, September, 1930, p. 200.) A "shift" is

defined as the period between the time at which the last man in the shift leaves the surface, and the time when the first man up reaches the surface.

Wages.—Wages are calculated by a highly complicated system. The coal fields are divided into eight districts, and each of these has its own basic rate. This is modified by various percentage and flat-rate additions, which differ from district to district, and are based on selling price, cost of living, etc. In addition, there is a minimum or subsistence wage, fixed by the day or by the shift, below which wages may not fall.

Holidays.—District agreements between employers and trade-unions provide for holidays of from 1 week to 10 days for certain specified types of workers in the coal industry, such as firemen, examiners, overmen, etc.

Overtime pay and allowances.—In the coal industry overtime is paid at one and one-third times the ordinary rate. By long-standing custom, various allowances in kind are also made to miners; these vary from field to field and are not reckoned in as part of the wage rate.

Actual average earnings.—Reports published periodically by the mines department are the source of information as to wages and earnings, and this is usually given in two forms—wages per ton of commercially disposable coal, and earnings per man-shift worked.

Table 5 shows these data, and also the average actual weekly earnings for the quarter ended June 30, 1932, together with the estimated average cash value of allowances in kind in each district in Great Britain, and the average number of shifts worked per week per worker:

TABLE 5.—WAGES IN COAL MINING IN GREAT BRITAIN, IN THE QUARTER ENDING JUNE 30, 1932

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

District	Average wage per ton of coal commercially disposable	Average number of shifts per week worked per man	Actual average weekly earnings per man	Average weekly value of allowances in kind per man	Earnings per man shift		
					British currency	United States currency	At par
	s. d.	s. d.	s. d.	s. d.	s. d.	\$	
Scotland.....	7 11½	5.45	47 10	0 2	8 9	2.13	\$1.44
Northumberland.....	7 2	4.74	36 3	4 11	7 7½	1.86	1.25
Durham.....	7 10	4.61	37 2½	5 3	8 0½	1.96	1.32
South Wales and Monmouthshire.....	10 0	4.80	42 4	1 0	8 11	2.17	1.46
Yorkshire.....	9 1	4.04	41 0½	1 4½	10 2	2.47	1.67
North Derby and Nottinghamshire.....	8 10½	3.97	40 11	1 3	10 3½	2.50	1.69
South Derby and Leicestershire, etc.....	10 6	4.23	40 9	1 4½	9 7½	2.34	1.58
Lancashire, Cheshire, and North Staffordshire.....	11 2½	4.48	41 6	0 2	9 3	2.25	1.52
Cumberland, North Wales, Staffordshire, Kent, etc.....	10 5½	4.94	43 5	1 2½	8 9½	2.14	1.44
Great Britain.....	9 1½	4.53	41 6	1 9	9 2	2.23	1.50

Changes in wages.—Table 6 shows that there has been very little change in earnings in the coal-mining industry since the middle of 1930, but a considerable drop since 1925. It also shows that the wages earned depend largely on the average number of shifts worked per

week per man, which vary as between the summer and winter quarters, and that the average number of shifts has not been over 4.86 per week since 1929. If the industry were working at full time throughout and the average number of shifts worked were, say, 5.75 per week per man, the average weekly earnings in the second quarter of 1932 would have been 52s. 8d. instead of 41s. 6d.

TABLE 6.—AVERAGE WEEKLY AND MAN-SHIFT WAGES IN COAL MINING IN GREAT BRITAIN IN SPECIFIED YEARS

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents
average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Year or quarter	Wages per ton of coal raised	Number of shifts per man per week	Actual weekly earnings per man	Weekly value of allowances in kind per man	Earnings per man-shift		
					British currency	United States currency	
						At par	At exchange rate
1925	12 9½	4.84	50 8	-----	10 6	\$2.55	\$1.72
1927	11 8½	4.84	47 2	1 11	10 0½	2.44	1.65
1928	10 7½	4.84	43 9	1 10	9 3½	2.26	1.52
1929	9 2	4.94	45 6	1 10	9 2¾	2.25	1.51
1930	9 3¾	4.71	43 9½	1 10	9 3½	2.26	1.52
1930							
Third quarter	9 5	4.68	43 7	1 9	9 4	2.27	1.53
Fourth quarter	9 3	4.73	44 1	1 11	9 4	2.27	1.53
1931							
First quarter	9 2	4.78	44 0	1 11	9 2	2.23	1.50
Second quarter	9 3	4.53	41 6	1 10	9 2	2.23	1.50
Third quarter	9 4	4.50	41 5	1 8	9 2	2.23	1.50
Fourth quarter	9 1	4.86	44 8	1 10	9 2	2.23	1.50
1932							
First quarter	9 1	4.71	43 3	1 11	9 2	2.23	1.50
Second quarter	9 1	4.53	41 6	1 9	9 2	2.23	1.50

¹ Including subvention.

² Excluding subvention.

Iron and Steel Industry

Hours of labor.—In general, the 8-hour day prevails throughout the trades and occupations grouped under this heading. At the time these figures were taken (the fall of 1932) blast-furnace employees, if on full time, were working eight hours a day and seven days a week.

Wage rates.—Throughout the whole of the pig-iron, wrought-iron, heavy-steel, and tin-plate trades, and the tube trade of Scotland, wage rates are adjusted by means of sliding scales based upon the selling price of the principal products of the industry concerned. A periodical survey of these prices is made for the purpose of determining what changes, if any, should be made in the wage rates. Taking the wage level of 1926 as a standard, one large firm gives the following estimate of the relative position during the four years ending December 30, 1932:

1926	100
1929	99
1930	99
1931	96
1932	96

Table 7, based on the experience of a limited number of firms, indicates the approximate rates paid in various departments of the iron and steel industry in 1931.

TABLE 7.—FULL-TIME WEEKLY EARNINGS IN THE IRON AND STEEL INDUSTRY OF GREAT BRITAIN, 1931

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Branch of industry and occupation	Earnings per full-time week			
	British currency	United States currency		
		At par	At exchange rate	
<i>Blast furnaces</i>				
Hand-charged furnaces:		s. d.		
Keepers	104 5	\$25.40	\$17.12	
Slaggers	73 1	17.78	11.99	
Slaggers' helpers	73 1	17.78	11.99	
Chargers (top fillers)	106 8	25.95	17.49	
Coke chargers	72 7	17.66	11.90	
Mine fillers (ore)	101 9	24.76	16.69	
Brakemen (hoistmen)	101 9	24.76	16.69	
Weighmen	51 4	12.49	8.42	
Coke fillers	91 0	22.14	14.92	
Gantry men, bunker men	87 0	21.17	14.27	
Blowing engineers	76 10	18.69	12.60	
Stove men, first	76 10	18.69	12.60	
Stove men, second	63 11	15.55	10.48	
Boiler men (3-ton boilers)	66 0	16.06	10.82	
Boiler men (14-ton boilers)	76 10	18.69	12.60	
Hydraulic engineers	53 0	12.89	8.69	
Pump men (tuyère)	61 3	14.90	10.05	
Turbo drivers	65 5	15.92	10.73	
Cleaners, boiler	72 1	17.54	11.82	
Pump men	58 2	14.15	9.54	
Furnace laborers	51 0	12.41	8.36	
Mechanically charged furnaces:		s. d.		
Keepers	104 3	25.36	17.10	
Slaggers	75 0	18.25	12.30	
Slaggers' helpers	75 0	18.25	12.30	
Weighmen	51 2	12.45	8.39	
Hoistmen	91 8	22.30	15.03	
Carmen	90 11	22.12	14.91	
Transfer carmen	65 10	16.02	10.80	
Coke crane drivers	70 1	17.05	11.49	
Oilers (first day shift only)	63 8	15.49	10.44	
Gantry men, bunker men	87 0	21.17	14.27	
Blowing engineers	76 10	18.69	12.60	
Stove men, first	76 10	18.69	12.60	
Stove men, second	63 11	15.55	10.48	
Boiler men (3-ton boilers)	66 0	16.06	10.82	
Boiler men (14-ton boilers)	76 10	18.69	12.60	
Hydraulic engineers	53 0	12.89	8.69	
Pump men (tuyère)	61 3	14.90	10.05	
Turbo drivers	61 7	14.98	10.10	
Cleaners, boiler	72 1	17.54	11.82	
Pump men	58 2	14.15	9.54	
Furnace laborers	51 0	12.41	8.36	
<i>Open-hearth furnaces</i>				
First hands	281 10	68.57	46.22	
Second hands	183 1	44.54	30.03	
Third hands	140 11	34.29	23.11	
Pitmen	193 9	47.14	31.78	
Pitmen's helpers	55 2	13.42	9.05	
Charge wheelers	56 4	13.71	9.24	
First ladle men	58 5	14.21	9.58	
Second ladle men	64 8	15.73	10.61	
Third ladle men	64 8	15.73	10.61	
Stopper makers	41 11	10.20	6.87	
Gas-producer men	63 0	15.33	10.33	
First hands, mixers	104 9	25.49	17.18	
Second hands, mixers	78 5	19.08	12.86	
Third hands, mixers	70 1	17.05	11.49	
Ladle men, mixers	51 11	12.63	8.51	
Pan fillers	51 11	12.63	8.51	
Pit steam-crane men	102 0	24.82	16.73	
Electric-crane men	67 11	16.52	11.14	
Boilermen	50 1	12.19	8.21	
Hydraulic-engine men	57 1	13.89	9.36	
Ingot weighmen	47 5	11.54	7.78	
Electric-charge men	60 2	14.64	9.87	

TABLE 7.—FULL-TIME WEEKLY EARNINGS IN THE IRON AND STEEL INDUSTRY OF GREAT BRITAIN, 1932—Continued

Branch of industry and occupation	Earnings per full-time week			
	British currency	United States currency		
		At par	At exchange rate	
<i>Rolling mills</i>				
Rollers	s. d.			
Coggers	130 5	\$31.73	\$21.39	
Roughers	63 4	15.41	10.39	
Finishers	63 4	15.41	10.39	
Finishers, extra	65 0	15.81	10.66	
Special finishers	58 11	14.33	9.66	
Guide setters	58 11	14.33	9.66	
Guide setters' helpers	58 4	14.19	9.57	
Saw men (cutters)	44 10	10.91	7.35	
Stoppers (for cutters)	64 0	15.57	10.50	
Stockers (pilers)	55 5	13.48	9.09	
Heaters	54 6	13.26	8.94	
Heaters, assistant	103 5	25.16	16.96	
Doggers	74 9	18.19	12.26	
Lid lifters (soaking pit)	59 10	14.56	9.81	
Firemen (soaking pit)	59 11	14.58	9.83	
First slaggers	55 4	13.46	9.07	
Second slaggers	51 4	12.49	8.42	
Engine drivers (mill)	50 8	12.33	8.31	
Oilers (engine)	54 11	13.36	9.01	
Condenser men (engine)	48 1	11.70	7.89	
Hydraulic-engine men	51 3	12.47	8.41	
Boiler firemen	48 1	11.70	7.89	
Boiler feeders (head men)	48 2	11.72	7.90	
Roller gear oilers	57 5	13.97	9.42	
Fillermen (turning ingots)	48 2	11.72	7.90	
Electric-crane men (100-ton)	59 10	14.56	9.81	
Electric-crane men (5-ton)	50 3	12.23	8.24	
Steam-crane men	53 6	13.02	8.77	
Steam-crane slingers (put on chains, etc.)	60 9	14.78	9.96	
First leaders, hot bank (cooling)	52 5	12.75	8.60	
Second leaders, hot bank (cooling)	69 0	16.79	11.32	
Gas-producer men	64 3	15.63	10.54	
Hot-bank cranemen	51 2	12.45	8.39	
Platform boys	70 7	17.17	11.58	
Platform boys, spare	15 0	3.65	2.46	
Roll changers, first hands	18 0	4.38	2.95	
Roll changers, second hands	18 10	4.58	3.09	
Roll changers, third hands	47 7	11.58	7.80	
	44 10	10.91	7.35	
	41 3	10.04	6.77	
<i>Open-hearth furnaces</i>				
First melters	s. d.			
Second melters	35 5	\$8.62	\$5.81	
Third melters	23 2	5.64	3.80	
Pitmen	18 11	4.60	3.10	
Pourers	17 5	4.24	2.86	
Ladle liners and patchers	16 6	4.01	2.71	
Slingers (for cranes)	11 6	2.80	1.89	
Gas-producer men	7 4	1.78	1.20	
Cranemen	9 0	2.19	1.48	
Laborers	9 5	2.29	1.54	
	10 0	2.43	1.64	
	6 6	1.58	1.07	
<i>Rolling mills</i>				
Heaters	s. d.			
Heaters' helpers	21 10	5.31	3.58	
Rollers	14 4	3.49	2.35	
Coggers	38 6	9.37	6.31	
Catchers	19 11	4.85	3.27	
Hookers	20 11	5.09	3.43	
Sawmen	14 0	3.41	2.30	
Cranemen	13 9	3.35	2.25	
Slingers	16 0	3.89	2.62	
General laborers	5 5	1.32	.89	
Roll engineers	7 11	1.93	1.30	
	10 7	2.58	1.74	
	6 5	1.56	1.05	
	6 6	1.58	1.07	
	12 3	2.98	2.01	

Overtime.—The rate paid for overtime to day workers is time and a quarter for the first two hours and time and a half thereafter.

General trend of average earnings.—The National Federation of Iron and Steel Manufacturers obtains data from its members (who include the great majority of the principal firms in the industry) showing the average weekly earnings of their workers. The returns do not provide separate particulars as to earnings of different classes of workers employed. The figures are greatly affected by the fact that much short time has been worked during the past few years. The following figures of the average earnings for all workers shows the general trend in average actual earnings in the industry over the past four years:

TABLE 8.—AVERAGE ACTUAL WEEKLY EARNINGS OF WORKERS IN IRON AND STEEL MANUFACTURE AT SPECIFIED DATES

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Date	British currency	United States currency	
		At par	At ex-change rate
July, 1929	60 8	\$14.76	\$9.95
December, 1929	58 5	14.21	9.58
July, 1930	57 10	14.07	9.48
December, 1930	52 0	12.65	8.53
July, 1931	55 0	13.38	9.02
December, 1931	54 1	13.16	8.87
July, 1932	53 6	13.02	8.77
September, 1932	54 0	13.14	8.86

Tin-Bar Manufacture

Basic wage rates in tin-bar manufacturing in Wales in 1932 are shown in Table 9:

TABLE 9.—BASIC WAGE RATES, PER SHIFT AND PER TON, IN TIN-BAR MANUFACTURING IN WALES, 1932

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Occupation	Basic rate per shift		
	British currency	United States currency	
		At par	At exchange rate
Stockers	8. 0	\$1.46	\$0.98
	6 6	1.58	1.07
	6 0	1.46	.98
Charging-machine operators	to		
	8 0	1.95	1.31
Teemers or pourers	1 8 4	1 2.03	1 1.37
Ladle men, first	2 6 3	2 1.52	2 1.02
Ladle men, second	2 5 3	2 1.28	.86
Pit cranemen	6 0	1.46	.98
Locomotive engineers	to		
	7 3	1.76	1.19
Switchmen	8 0	1.95	1.31
	6 0	1.46	.98
Switchmen	to		
	7 0	1.70	1.15
Laborers	5 0	1.22	.82
Reheating furnace:			
Pusher boys	3 6	1.85	1.57
Coal men	5 6	1.34	.90
	to		
	6 0	1.46	.98
Basic rate per ton ⁴			
Acid process:			
First melters	d.		
Second melters	9 1/2	\$0.19	\$0.13
	6 3/4	.14	.09
Basic process:			
First melters	10 1/4	.22	.15
Second melters	7 1/4	.15	.10
Third melters	5	.10	.07
Pitmen	7	.14	.10
Pitmen's helper	2	.04	.03
Soaking pit:			
Heaters	4 1/2	.09	.06
Helpers	2 1/4	.05	.03
Reheating furnace:			
Ballers	3	.06	.04
Gasmen	4 1/2	.09	.06
Pull-up boys	3	.06	.04
Rolling:	0 5/8	.01	.01
Rollers	2 1/16	.04	.03
Roughers	1 1/8	.04	.02
Barrers, first	1	.02	.01
Barrers, second	0 1/8	.02	.01
Shearers	1 1/4	.03	.02

¹ Plus 1d. per ton among 3 men.

² Plus 1/6d. per ton among 3 men.

³ Approximately.

⁴ Divided among 3 men..

Textile Industries

Cotton Textiles

Method of fixing wages.—According to the Cotton Yearbook (Manchester) "the system of paying wages in the cotton industry is unique. All wages for spinning yarn and manufacturing cloth are paid according to the amount of production. The elaborate piece price lists which are now in existence have been handed down from generation to generation, probably from the time before the factory system came into being." It is estimated that 85 to 90 per cent of the total number of operatives in the cotton industry are paid on a "piece rate" basis.

Average earnings in 1924.—At the present time wages vary widely and generalizations as to averages are difficult and should be used cautiously. Following an official inquiry in 1924, it was stated that the average earnings in the cotton industry as a whole amounted to 10 pence (at par, 20 cents; at exchange rate, 14 cents) per hour, but included in this figure were the wages of both juvenile and the higher paid operatives, the former earning from 12 to 15 shillings and the latter from 75 to 90 shillings per week.

Important changes in 1932.—During the year 1932, both the spinning and weaving sections of the cotton industry have been involved in wage disputes of a serious character. The initiative was taken by the manufacturing section and, following a sectional strike in the Burnley area, one involving the whole of Lancashire was called by the operatives' unions as a protest against a wage reduction of 12½ per cent (actual) proposed by the employers. Following Government intervention through the Ministry of Labor, a new agreement, known as the "Midland," was drawn up on September 27, 1932. Since this date a somewhat similar agreement has been adopted in the spinning section. In the Midland agreement the former separate arrangements on wages in different sections of the weaving industry have been eliminated, and a further satisfactory feature is that, in addition to joint rules for the settlement of disputes, effective safeguards against a stoppage of work during periods of negotiations have been provided.

In reaching the settlement, the weaving section employees agreed that their wages should be reduced by 15½ per cent of the standard piece-price list, which was equivalent to 8.493 per cent off former wages, while the spinners accepted a reduction of 14 per cent on the standard list, equivalent to an actual reduction of 7.67 per cent.

The percentage addition on the standard piece-price list in 1906 was 5 per cent, while in the weaving section payment was made at list rates. In 1913 all sections were on a basis of 5 per cent above the list. During 1916 and 1917 all sections were advanced 35 per cent; during June, 1918, there was a further advance of 25 per cent; and in December, 1918, a Government board of arbitration granted an additional 50 per cent advance. To cover the reduction in earnings on account of the working week being changed from 55½ to 48 hours in June, 1919, a 30 per cent increase was sanctioned. After a further increase of 70 per cent in 1920, all piece-rate wages in the industry stood at 215 per cent above the standard lists. Then began a reaction. Between June, 1921, and October, 1922, there occurred cuts in the percentage of list rates aggregating 120 per cent,

and after a lengthy struggle a further cut of 12½ per cent was accepted by the trade-unions, leaving the rate at 82½ per cent above the standard lists.

As a result of the 1932 disputes, the spinning and weaving employees separately agreed with their employers, the former accepting 14 per cent and the latter 15½ per cent reductions, leaving the present rates at 67 and 68½ per cent, respectively.

More looms per weaver agreement.—The foregoing brief outline will serve to illustrate the difficulty in computing wages in the British cotton industry, and, with the ratification of the "more-looms agreement" which was concluded on December 28, 1932, to become effective January 2, 1933, determination of the wages of those affected becomes even more complicated.

The principal feature of this latest agreement is a provision that the standard shall be 36-inch cloth, 60 ends per inch woven in a 60 reed 26s weft and fine counts, on a wage basis of 17½ pence (at par, 4 cents; at exchange rate, 3 cents) per 100,000 picks, each weaver taking care of 6 looms. For other widths, types of cloth, etc., percentage additions or deductions are to be made from the standard. Provision is made for temporary experiments upon payment of a weekly wage of 45 shillings, or 10 per cent more than the average earnings when working four looms, whichever is higher. The fall-back or part-time wage is fixed at 66½ per cent, or 28 shillings per week, whichever is higher, but the employer retains the right to remove warps or play off a weaver when 50 per cent of the usual number of looms are idle.

Average earnings in autumn of 1932.—In 1906 there was held an official inquiry into the actual earnings of cotton operatives, which were subsequently published in tabular form. This table has never been officially revised, and it was then stated that there was often a great difference in the amount earned by one operative and another, even when employed at similar work in the same mill. Since there is no other available basis of estimation, the table published in 1906 must be used and amended in accordance with the percentage changes in average earnings since that time. The changes which have occurred are shown herewith:

TABLE 10.—PERCENTAGE CHANGES IN AVERAGE EARNINGS IN THE COTTON INDUSTRY, 1906 TO 1932

Date	Assuming standard list to be 100	Per cent of actual earnings	Assuming actual earnings to be 100
1906	105		100.0
June, 1907	Add. 5	4.8	4.8
March, 1909	Deduct. 5	4.5	104.8
			4.1
June, 1915	Add. 5	4.8	100.7
			4.8
June, 1916	Add. 5	4.5	105.5
			4.7
February, 1917	Add. 10	8.7	110.2
			9.6
December, 1917	Add. 15	12.0	119.8
			14.4
June, 1918	Add. 25	17.9	134.2
			24.0
December, 1918	Add. 50	30.3	158.2
			47.9
July, 1919	Add. 30	13.9	206.1
			(1)
May, 1920	Add. 70	28.6	206.1
			58.9
June, 1921	Deduct. 60	19.0	265.0
			50.4
December, 1921	Deduct. 10	3.9	214.6
			8.4
April, 1922	Deduct. 40	12.2	206.2
			25.2
November, 1922	Deduct. 10	4.9	181.0
			8.9
August, 1929	Deduct. 12½	6.4	172.1
			11.0
October, 1932	Deduct. 14	7.7	161.1
			12.4
		168½	148.7

¹ No addition is here made, inasmuch as the increase on the standard list of 30 points, equivalent to 13.9 per cent on actual earnings, was granted to compensate for the reduction which would otherwise have resulted from the decrease of weekly hours of labor (piece rates) from 55½ to 48 hours.

Since it appears that average earnings have increased 48.7 per cent, the 1906 table with the individual figures increased by this percentage will give approximately the present average weekly earnings. Table 11 gives these earnings (calculated to the nearest shilling) for the localities specified:

TABLE 11.—AVERAGE WEEKLY EARNINGS¹ OF WORKERS IN THE LANCASHIRE COTTON INDUSTRY, AUTUMN OF 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents; average exchange rate for December, 1932=16.4 cents]

Sex and occupation	Ashton-under-Lyne			Oldham			Bolton		
	British currency	United States currency		British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate
<i>Males</i>									
Spinners, counts below 40	\$9	\$14.35	\$9.68	\$62	\$15.08	\$10.17	\$65	\$15.81	\$10.66
Spinners, counts 40 to 80	68	16.54	11.15	62	15.08	10.17	66	16.06	10.82
Spinners, counts above 80	62	15.08	10.17	64	15.57	10.50	70	17.03	11.48
Big piecers	27	6.57	4.43	28	6.81	4.59	23	5.60	3.77
Twiners	58	14.11	9.51	61	14.84	10.00			
Ball warpers				66	16.06	10.82	63	15.33	10.33
Sizers, tapers, and slashers	64	15.57	10.50				63	15.33	10.33
Warp dressers									
Twisters in	40	9.73	6.56				41	9.98	6.72
Drawers in	53	12.89	8.69				42	10.22	6.89
Weavers, 4 looms	34	8.27	5.58				37	9.00	6.07
<i>Females</i>									
Drawing-frame tenders	31	7.54	5.08	33	8.03	5.41	29	7.06	4.76
Slubbing-frame tenders	31	7.54	5.08	33	8.03	5.41	26	6.33	4.26
Intermediate-frame tenders	30	7.30	4.92	29	7.06	4.76	26	6.33	4.26
Roving-frame tenders	29	7.06	4.76	29	7.06	4.76	28	6.81	4.59
Ring spinners				24	5.84	3.94	22	5.35	3.61
Reelers	22	5.35	3.61	22	5.35	3.61	19	4.62	3.12
Doublers				23	5.60	3.77	21	5.11	3.44
Winders	22	5.35	3.61	23	5.60	3.77	21	5.11	3.44
Beam warpers	29	7.06	4.76	31	7.54	5.08	29	7.06	4.76
Weavers, 4 looms	33	8.03	5.41	33	8.03	5.41	34	8.27	5.58
<i>Lehigh</i>									
<i>Manchester</i>									
<i>Stockport</i>									
<i>Males</i>									
Spinners, counts below 40	\$8.			\$8.			\$8.		
Spinners, counts 40 to 80	72	\$17.52	\$11.81	60	\$14.60	\$9.84	56	\$13.62	\$9.18
Spinners, counts above 80	69	16.79	11.32	70	17.03	11.48	71	17.27	11.64
Big piecers	23	5.60	3.77	23	5.60	3.77	28	6.81	4.59
Twiners				68	16.54	11.15			
Ball warpers				57	13.87	9.35			
Sizers, tapers, and slashers							62	15.08	10.17
Warp dressers									
Twisters in				38	9.25	6.23	33	8.03	5.41
Drawers in				37	9.00	6.07			
Weavers, 4 looms							34	8.27	5.58
<i>Females</i>									
Drawing-frame tenders	26	6.33	4.26	27	6.57	4.43	31	7.54	5.08
Slubbing-frame tenders	24	5.84	3.94	26	6.33	4.26	29	7.06	4.76
Intermediate-frame tenders	25	6.08	4.10	25	6.08	4.10	29	7.06	4.76
Roving-frame tenders	25	6.08	4.10	25	6.08	4.10	29	7.06	4.76
Ring spinners				19	4.62	3.12	25	6.08	4.10
Reelers	19	4.62	3.12	20	4.87	3.28	21	5.11	3.44
Doublers									
Winders	25	6.08	4.10	20	4.87	3.28	22	5.35	3.61
Beam warpers	25	6.08	4.10	26	6.33	4.26	32	7.79	5.25
Weavers, 4 looms	30	7.30	4.92	30	7.30	4.92	33	8.03	5.41

¹ To the nearest shilling.

TABLE 11.—AVERAGE WEEKLY EARNINGS OF WORKERS IN THE LANCASHIRE COTTON INDUSTRY, AUTUMN OF 1932—Continued

Sex and occupation	Preston			Blackburn			Accrington									
	British currency	United States currency		British currency	United States currency		British currency	United States currency								
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate							
<i>Males</i>																
Spinners, counts below 40	\$.	\$13.62	\$9.18	\$.	\$10.46	\$7.05	\$.	\$11.92	\$8.04							
Spinners, counts 40 to 80	56	13.87	9.35	45	10.95	7.38	49	12.17	8.20							
Spinners, counts above 80	57	15.08	10.17	—	—	—	50	—	—							
Big piecers	26	6.33	4.26	27	6.57	4.43	27	6.57	4.43							
Twiners	—	—	—	—	—	—	—	—	—							
Ball warpers	—	—	—	—	—	—	—	—	—							
Sizers, tapers, and slashers	63	15.33	10.33	79	19.22	12.96	63	15.33	10.33							
Warp dressers	54	13.14	8.86	—	—	—	—	—	—							
Twisters in	37	9.00	6.07	36	8.76	5.90	39	9.49	6.40							
Drawers in	45	10.95	7.38	46	11.19	7.54	47	11.44	7.71							
Weavers, 4 looms	30	7.30	4.92	38	9.25	6.23	36	8.76	5.90							
<i>Females</i>																
Drawing-frame tenders	29	7.06	4.76	30	7.30	4.92	—	—	—							
Slubbing-frame tenders	29	7.06	4.76	29	7.06	4.76	—	—	—							
Intermediate-frame tenders	29	7.06	4.76	22	5.35	3.61	—	—	—							
Roving-frame tenders	29	7.06	4.76	30	7.30	4.92	—	—	—							
Ring spinners	—	—	—	29	7.06	4.76	—	—	—							
Reelers	—	—	—	—	—	—	—	—	—							
Doublers	—	—	—	—	—	—	—	—	—							
Winders	23	5.60	3.77	24	5.84	3.94	23	5.60	3.77							
Beam warpers	33	8.03	5.41	33	8.03	5.41	—	—	—							
Weavers, 4 looms	34	8.27	5.58	37	9.00	6.07	35	8.52	5.74							
<i>Burnley</i>																
									<i>Bacup</i>					<i>Rochdale</i>		
<i>Males</i>										—	—	—	—	—	—	—
Spinners, counts below 40	\$.	—	—	\$.	—	—	\$.	—	—	—	—	—	—	—	—	—
Spinners, counts 40 to 80	42	\$10.22	\$6.89	46	\$11.19	\$7.54	58	\$14.11	\$9.51	—	—	—	—	—	—	—
Spinners, counts above 80	—	—	—	—	—	—	63	15.33	10.33	—	—	—	—	—	—	—
Big piecers	—	—	—	29	7.06	4.76	29	7.06	4.76	—	—	—	—	—	—	—
Twiners	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ball warpers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sizers, tapers, and slashers	64	15.57	10.50	63	15.33	10.33	57	13.87	9.35	—	—	—	—	—	—	—
Warp dressers	67	16.30	10.99	—	—	—	57	13.87	9.35	—	—	—	—	—	—	—
Twisters in	39	9.49	6.40	33	8.03	5.41	52	12.65	8.53	—	—	—	—	—	—	—
Drawers in	49	11.92	8.04	42	10.22	6.89	36	8.76	5.90	—	—	—	—	—	—	—
Weavers, 4 looms	38	9.25	6.23	36	8.76	5.90	44	10.71	7.22	—	—	—	—	—	—	—
<i>Females</i>										—	—	—	—	—	—	—
Drawing-frame tenders	—	—	—	27	6.57	4.43	32	7.79	5.25	—	—	—	—	—	—	—
Slubbing-frame tenders	—	—	—	25	6.08	4.10	32	7.79	5.25	—	—	—	—	—	—	—
Intermediate-frame tenders	—	—	—	26	6.33	4.26	29	7.06	4.76	—	—	—	—	—	—	—
Roving-frame tenders	—	—	—	25	6.08	4.10	28	6.81	4.59	—	—	—	—	—	—	—
Ring spinners	—	—	—	—	—	—	24	5.84	3.94	—	—	—	—	—	—	—
Reelers	—	—	—	—	—	—	24	5.84	3.94	—	—	—	—	—	—	—
Doublers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Winders	—	—	—	24	5.84	3.94	23	5.60	3.77	—	—	—	—	—	—	—
Beam warpers	—	—	—	—	—	—	33	8.03	5.41	—	—	—	—	—	—	—
Weavers, 4 looms	37	9.00	6.07	34	8.27	5.58	33	8.03	5.41	—	—	—	—	—	—	—

The foregoing table should be considered only in the broadest sense as a general indication of present earnings, because in many cases the individual figures shown probably differ from the actual amounts received by the workers.

Hours of labor.—During May and June, 1919, an agreement was reached between the operatives and employers whereby the hours per week were reduced from 55½ to 48 and, as previously mentioned, an increase of 30 per cent on list rates was granted to cover what otherwise would have resulted in a reduction of wages. The 48-hour week has continued and was confirmed in the agreements reached during September and October, 1932.

Average earnings, 1929 to 1932.—Much short time has prevailed in the industry over the past few years. For a week ending approximately on October 22, in each of the last four years, the percentage of workers on short time, and the average hours lost by each, were as follows:

TABLE 12.—PER CENT OF WORKERS ON SHORT TIME AND THE AVERAGE HOURS LOST PER WEEK IN THE COTTON INDUSTRY, 1929 TO 1932

Year	Per cent on short time	Average hours lost
1929	11.0	13½
1930	27.0	16
1931	12.0	15½
1932	9.5	17

The actual earnings of the workers were considerably influenced by this prevalence of short time, as appears in Table 13, compiled from data published in the *Labor Gazette*:

TABLE 13.—AVERAGE WEEKLY EARNINGS OF WORKERS IN SPECIFIED DEPARTMENTS OF THE COTTON INDUSTRY DURING A WEEK ENDING APPROXIMATELY OCTOBER 22, 1929 TO 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Occupation	1929		1930		1931		1932	
	British currency	United States currency at par	British currency	United States currency at par	British currency	United States currency	British currency	United States currency
Preparing	s. d.	s. d.	s. d.	s. d.	s. d.	At par	s. d.	s. d.
Preparing	32 5	\$7.89	29 9	\$7.24	31 4	\$7.62	\$5.14	31 11
Spinning	32 7½	7.94	27 9½	6.76	31 7	7.68	5.18	31 0
Weaving	34 6	8.39	30 8	7.46	32 3½	7.86	5.30	31 4
Other	42 9	10.40	39 2½	9.54	44 7½	10.86	7.32	44 10
Total	35 8	8.68	31 3	7.60	33 4	8.11	5.47	32 9½
								7.98
								5.38

Wool Textiles

Agreement of August, 1919.—At the present time there is no agreed scale of wages in the wool textile industry. The last wages agreement was made in August, 1919, and operated until October, 1927, when

the employers gave notice for its termination, as they desired to negotiate a reduction in the rates of payment. Negotiations for a new agreement continued for more than two years, during which period wage rates were unaltered. As the deliberations between the two sides showed no signs of resulting in an agreement, a few leading employers in the early part of 1929 enforced reductions of about 10 per cent on their own responsibility, but the majority continued to negotiate and pay the old rates of wages. The dispute was referred to a court of inquiry in January, 1930, which, two months later, recommended that the wages of timeworkers be reduced by 9.249 per cent, and of pieceworkers by 8.766 per cent. The employers offered to make an agreement with the trade-unions on the basis of those terms, but the workers were unwilling to accept them and in some districts a strike occurred. Ultimately the reductions were enforced in the majority of the mills, except those which had already imposed the 10 per cent reduction and a few where lesser reductions were effected.

Reductions in 1931.—In July, 1931, the employers decided to enforce a further reduction of 11.7 per cent and refused to discuss the matter with the trade-unions, reserving to themselves full liberty of action to make individual contracts of employment with their workers. There was some resistance on the part of the workers, but eventually employment was resumed in most of the mills on the new wage rates proposed by the employers. In a few instances this second reduction was not enforced and in some others only part of the 11.7 per cent cut was imposed, with the result that different scales were operating for the same class of work in various towns. However, some of the latter firms have since adopted the 11.7 per cent reduction.

In the absence of an agreement in the industry there is no official scale of wages, but it is generally recognized that the prevailing unofficial rates to which most employers adhere are those set out in the 1919 agreement, less approximately 20 per cent. Time rates are the basis on which all wages are calculated. The general time rate now is the basic rate, plus 5 per cent, plus 52 per cent cost-of-living increase. Pieceworkers are paid 88 per cent of timeworkers' cost-of-living increase, so that piecework rates are the basic rate, plus 5 per cent, plus 45.76 per cent.

Overtime.—The rates paid for overtime are one and one-fourth times the ordinary rates for the first two hours and one and one-half times thereafter.

Present wage rates.—The rates now being paid in the industry, as well as the basic rates, are shown in Table 14:

TABLE 14.—BASIC AND PRESENT WEEKLY WAGE RATES IN THE WOOL TEXTILE INDUSTRY

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Class of worker or kind of work done	Basic rate	Present rate			
		British currency	United States currency		
			At par	At exchange rate	
Semiskilled workers and laborers:					
Timeworkers	s. d.	s. d.			
30 0	45 7	\$11.09	\$7.48		
28 11	44 0	10.71	7.22		
27 9	42 2	10.26	6.92		
17 0	25 10	6.29	4.24		
20 0	33 8	8.19	5.52		
Pieceworkers					
Worsted spinning:					
First drawer	15 8	23 10	5.80	3.91	
Do	15 2	23 0½	5.61	3.78	
Rover	14 8	22 3½	5.42	3.66	
Twister	15 2	23 0½	5.61	3.78	
Winder	14 2	21 6½	5.24	3.53	
Reeler	15 8	23 10	5.80	3.91	
Warper	17 1½	26 0	6.33	4.26	
Doffer	12 6	19 0	4.62	3.12	
Spinner	13 10	21 0	5.11	3.44	
Worsted weaving:					
Dress goods, 2 looms per weaver	19 0	27 8	6.73	4.54	
Coatings, 2 looms per weaver	21 0	30 6	7.42	5.00	
Coating looms, plain, including mixing boxes—					
1 loom per weaver	19 0	27 8	6.73	4.54	
2 looms per weaver	21 6	30 10	7.50	5.06	
Coating looms, plain, with drop boxes—					
1 loom per weaver	20 0	29 2	7.10	4.78	
Woolen weaving:					
Tappet looms—					
1 loom per weaver	19 0	27 8	6.73	4.54	
2 looms per weaver	21 6	30 10	7.50	5.06	
Box looms, plain—					
1 loom per weaver	19 0	27 8	6.73	4.54	
2 looms per weaver	21 6	30 10	7.50	5.06	
Box looms, fancy—					
1 loom per weaver	20 0	29 2	7.10	4.78	
Blanket looms—					
1 loom per weaver	19 0	27 8	6.73	4.54	
2 looms per weaver	21 6	30 10	7.50	5.06	
Blanket box looms, plain, 1 loom per weaver	19 0	27 8	6.73	4.54	
Rugs, cotton warps, 1 loom per weaver	20 0	29 2	7.10	4.78	
Plain looms and bastard box, 1 loom per weaver	19 0	27 8	6.73	4.54	
Box looms, under 80 picks, 1 loom per weaver	20 0	29 2	7.10	4.78	
Box looms, 80 picks and over, 1 loom per weaver	21 0	30 6	7.42	5.00	

Holidays.—In the lambs' wool and worsted yarn spinning trades at Leicester, equal contributions are paid by employers and workers for 48 weeks in the year toward a holiday fund, the contributions being 6d. (at par, 12 cents; at exchange rate, 8 cents) for males 18 years of age and over, and smaller amounts for women and juveniles. Payment from the fund is made not later than the day following resumption of work after the August bank holiday (the first Monday in August).

Actual average earnings.—The actual earnings of operatives in the wool textile industries are affected by the amount of short time or overtime worked. Tables 15 and 16, compiled from figures given in the Labor Gazette, show the numbers employed, the percentage working short time or overtime, the average number of hours of lost time or of overtime, and the average actual earnings of workers in the different sections and occupations specified for corresponding weeks in 1931 and 1932:

TABLE 15.—NUMBER EMPLOYED IN TEXTILE WOOL INDUSTRY IN TWO SPECIFIED WEEKS IN 1931 AND 1932, PER CENT WORKING SHORT TIME AND OVERTIME, AND AVERAGE HOURS OF LOST TIME OR OF OVERTIME

Industry and occupation	Week ending Oct. 24, 1931					Week ending Oct. 22, 1932				
	Number of workers employed	Per cent working short time	Average hours lost	Per cent working overtime	Average hours overtime worked	Number of workers employed	Per cent working short time	Average hours lost	Per cent working overtime	Average hours overtime worked
Worsted section:										
Wool sorting and combing	11,181	12.5	13	15	9	10,310	16.5	12	23	8 $\frac{3}{4}$
Spinning	35,537	11.5	11	34	6	36,998	11.0	10 $\frac{1}{2}$	33	6 $\frac{1}{2}$
Weaving	17,272	39.0	12	8	7	17,518	33.0	11	6	6 $\frac{1}{2}$
Total worsted, including other departments	75,119	20.0	12	23	6	76,205	19.0	11 $\frac{1}{2}$	24	7
Woolen section:										
Spinning	12,199	22.0	11	25	8 $\frac{1}{2}$	12,385	27.0	10	21.5	8
Weaving	21,130	29.0	11	14	6	22,022	30.0	11 $\frac{1}{2}$	12.0	7 $\frac{1}{2}$
Total woolen, including other departments	52,309	26.0	11	17	8	53,467	29.0	11	15.0	8
Carpet section	9,981	21.0	14	11	6	10,229	8.5	14 $\frac{1}{2}$	8.0	8

TABLE 16.—AVERAGE EARNINGS OF WORKERS IN THE WOOL TEXTILE INDUSTRY IN SPECIFIED WEEKS IN 1931 AND 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Section and occupation	Week ending Oct. 24, 1931				Week ending Oct. 22, 1932			
	British currency	United States currency		British currency	United States currency		British currency	United States currency
		At par	At exchange rate		At par	At exchange rate		
Worsted section:								
Wool sorting and combing	s. d.	\$10.77	\$7.26	s. d.	\$10.49	\$7.07		
Spinning	44 3			43 1 $\frac{1}{2}$				
Weaving	28 11	7.04	4.74	29 1	7.08	4.77		
Total worsted, including other departments	34 3	8.33	5.62	34 5	8.37	5.64		
Woolen section:								
Spinning	41 8	10.14	6.83	39 3 $\frac{1}{2}$	9.56	6.45		
Weaving	35 2	8.56	5.77	32 10 $\frac{1}{2}$	8.00	5.39		
Total woolen, including other departments	39 5	9.59	6.46	37 3	9.06	6.11		
Carpet section	36 10	8.96	6.04	38 3 $\frac{3}{4}$	9.32	6.28		

Table 17 compares average actual earnings for a corresponding week in four years:

TABLE 17.—AVERAGE ACTUAL EARNINGS IN THE WOOL TEXTILE INDUSTRY DURING A WEEK IN OCTOBER, 1929, 1930, 1931, AND 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Department and section	1929		1930		1931		1932		United States currency				
	British currency	United States currency at par	British currency	United States currency at par	British currency	United States currency at par	British currency	At par	At exchange rate				
Worsted section:													
Wool sorting and combing	8. 46	d. 1	\$11.21	8. 142	d. 8½	\$10.39	8. 44	d. 3	\$10.77	8. 43	d. 1½	\$10.49	\$7.08
Spinning	31	1¾	7.57	29	7	7.20	28	11	7.04	29	1	7.08	4.77
Weaving	41	5	10.08	39	4	9.57	34	3	8.33	34	5	8.37	5.64
Total worsted (including other departments)	38	2¾	9.30	36	4	8.84	34	4¾	8.37	34	4½	8.36	5.64
Woolen section:													
Spinning	42	8½	10.39	42	6	10.34	41	8	10.14	39	8½	9.66	6.52
Weaving	36	5½	8.87	34	7	8.41	35	2	8.56	32	10½	8.00	5.39
Total woolen (including other departments)	40	9½	9.92	38	4	9.33	39	5	9.59	37	3	9.06	6.11
Carpet section	37	4	9.08	33	9	8.21	36	10	8.96	38	3¾	9.33	6.28

¹ Unusual amount of short time during this particular week.

Silk

Wages paid in the silk industry are those fixed by agreement between the employers' associations and the trade-unions, and differ in the two centers of the industry—Macclesfield and Leek.³

At Leek woman timeworkers aged 21 years and over are paid 28 shillings (at par, \$6.81; exchange rate, \$4.59) a week. The majority of woman workers in Leek are pieceworkers and their rates are fixed at a figure to yield the average worker at least about 20 per cent above a time rate of 27 shillings (at par, \$6.57; at exchange rate, \$4.43) per week. At Macclesfield women are far more generally employed as time workers.

Table 18 shows the weekly time rates for men at Leek and for men and women at Macclesfield. Unless otherwise specified, the rates given for men at Leek are for workers 22 years of age and over, and are those fixed by an agreement effective December, 1930, which is subject to sliding-scale changes with the cost of living, under which there were reductions in the summer of 1932 of from 1 to 3 shillings 6 pence, according to the grade of worker.

³ Some silk textiles are made in Bradford and Leeds, the center of wool textile manufacture, the wages there being those paid to wool textile workers in the district.

TABLE 18.—WAGE RATES PER WEEK OF SILK WORKERS AT LEEK AND MACCLESFIELD, 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Locality, and class of worker	British currency	United States currency	
		At par	At exchange rate
<i>Leek</i>			
Men:		s. d.	
Pickers	43 0	\$10.46	\$7.05
Braid workers, spindle fettlers, oilers, cleaners, spinners, throwers, reelers	45 0	10.95	7.38
Braid speeders and knitting tacklers (fully qualified)	50 0	12.17	8.20
Weavers	51 0	12.41	8.36
Mechanics	62 0	15.08	10.17
Dyers and glossers (22 years)	46 0	11.19	7.54
Dyers and glossers (22½ years)	47 6	11.56	7.79
Dyers and glossers with no experience in dyeing trade—			
First month	35 6	8.64	5.82
Rising monthly to tenth month	47 6	11.56	7.79
Dyers' mixers—			
First year	47 6	11.56	7.79
Second year	48 6	11.80	7.95
Third year	49 6	12.04	8.12
Fourth year	55 6	13.50	9.10
Dyeing-machine men—			
1 man to 1 machine	49 6	12.04	8.12
2 men to 3 machines	50 6	12.29	8.28
1 man to 2 machines	51 6	12.53	8.45
<i>Macclesfield</i>			
Men:			
Soft-silk trade—			
Power-loom overlookers	65 0	15.81	10.66
Harness builders, warehousemen, overlookers, and knitting tacklers (20 years and over)	52 0	12.65	8.53
Other workers (except weavers) 20 years and over	50 0	12.17	8.20
Thrown or hard silk trade—			
Throwing-mill men	45 0	10.95	7.38
Overlookers	50 0	12.17	8.20
Spinners, single thread	33 0	8.03	5.41
Spinners, twofold	35 0	8.52	5.74
Dyers and finishers (22 years and over)	44 8	10.87	7.33
Hand-loom weavers	0 ¹ 9	.18	.12
Designers	73 0	17.76	11.97
	76 6	18.61	12.55
Women:			
Soft-silk trade (20 years and over)—			
Manufacturing section—			
Winders and pickers	28 0	6.81	4.59
Warpers and twisters	31 6	7.66	5.17
Making-up section	28 0	6.81	4.59
Small-ware department	28 0	6.81	4.59
Embroidery section—			
Hand-machine threaders	28 0	6.81	4.59
Hand-machine minders	28 0	6.81	4.59
Schiffli-machine minders	29 0	7.06	4.76
Knitting section	30 6	7.42	5.00
Finishing section	29 0	7.06	4.76
Thrown silk trade (20 years and over)—			
Knotters, doublers, drammers, and reelers	29 6	7.18	4.84
Parters	30 6	7.42	5.00
Danters	30 0	7.30	4.92
Winders and cleaners	28 0	6.81	4.59
Spinners, single thread	31 0	7.54	5.08
Spinners, twofold	33 0	8.03	5.41
Dyers and finishers (18 years and over)	26 4	6.41	4.32

¹ Per hour, plus 70 per cent.

Overtime.—Overtime is paid at time and a quarter until 8 p. m., after which it is paid at time and a half.

Bleaching, Dyeing, and Finishing

Hours of labor.—The hours of labor in a full week are 48, except for night workers in Lancashire, Cheshire, and Derbyshire, for whom they are 43½.

Wages.—Time wages are calculated differently in the various districts. In some there is a basic rate, to which is added a cost-of-living percentage, varying as the index figure published by the Ministry of Labor rises or falls, while in others there is a flat minimum rate. Piece rates are fixed in relation to time rates, and a common arrangement is that they shall be such as to yield at least 25 per cent in excess of the basic time rate before the cost-of-living rate is added; in Yorkshire it is also provided that employees engaged on night work shall receive 2 shillings 6 pence per night extra.

The following are the rates prevailing in the districts and for the classes named, revised to November, 1932. In Yorkshire, area A is the district covered by the Bradford Dyers' Association, and area B is that covered by other employers' associations.

TABLE 19.—WEEKLY WAGE RATES IN THE TEXTILE BLEACHING, DYEING, AND FINISHING TRADES, NOVEMBER, 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

District, and class of worker	Basic rate	Cost-of-living addition	Total rate		
			British currency	United States currency	
				At par	At exchange rate
Yorkshire, area A: Men, 21 years and over	1 28 0	43	s. d.	s. d.	\$10.53
Yorkshire, area B:			Per cent	43 3½	\$7.10
Men, 21 years and over	30 3	43		10.52	7.09
Women, 18 years and over, except menders	18 0	43		6.27	4.22
Hebden Bridge:			s. d.		
Dyers and Class A finishers, 21 years and over	29 0	13 0	42 0	10.22	6.89
Other men, 21 years and over	28 0	13 0	41 0	9.98	6.72
Female enders and menders, 18 years and over	26 5	7 9	34 2	8.31	5.60
Lancashire, Cheshire, and Derbyshire, except Middleton:					
Men, 21 years and over	28 0	13 0	41 0	9.98	6.72
Women, 18 years and over	18 0	7 9	25 9	6.27	4.22
Middleton:					
Dyers, 21 years and over	30 0	13 1	43 1	10.48	7.07
Male polishers	28 0	13 1	41 1	10.00	6.74
Female polishers	22 0	8 1	30 1	7.32	4.93
Scotland:					
Men, 21 years and over	25 0	13 0	38 0	9.25	6.23
Women, 21 years and over	15 0	7 9	22 9	5.54	3.73

¹ Plus 8 per cent.

Overtime.—Overtime is usually paid at time and a quarter for the first two hours and time and a half thereafter to timeworkers; to pieceworkers, 3d. or 4½d. (at par, 6 or 9 cents; at exchange rate for December, 1932, 4 or 6 cents) per hour extra is paid for all overtime, unless it falls between 6 p. m. and 6 a. m., when 9d. per hour is paid.

Calico Print Works

Wages are made up of a minimum weekly rate, plus a cost-of-living addition. Table 20 shows these two factors for engravers, and the total weekly wage, as of November, 1932. In Scotland the basic rate is nominally 1s. a week less than the figures given in this table.

TABLE 20.—WEEKLY WAGE RATES FOR ENGRAVERS IN CALICO PRINT WORKS, NOVEMBER, 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Occupation	Basic rate	Cost-of-living addition	Total wage rate		
			British currency	United States currency	
				At par	At exchange rate
Sketch makers.....	41 0	7 5	48 5	\$11.78	\$7.94
Die cutters.....	45 0	8 3½	53 3½	12.96	8.74
Clammers.....	41 0	7 5	48 5	11.78	7.94
Machine engravers.....	41 0	7 5	48 5	11.78	7.94
Eccentric engravers.....	41 0	7 5	48 5	11.78	7.94
Hand engravers.....	41 0	7 5	48 5	11.78	7.94
Stipplers.....	45 0	8 3½	53 3½	12.96	8.74
Plate cutters.....	41 0	7 5	48 5	11.78	7.94
Pentographers.....	38 0	7 0	45 0	10.95	7.38
Impressioners.....	38 0	7 0	45 0	10.95	7.38
Etchers.....	41 0	7 5	48 5	11.78	7.94

Linen (Northern Ireland)

The manufacture of linen, with its allied trades, is an important industry in Northern Ireland, where it normally gives employment to about 85,000 workers or, roughly, 34 per cent of the total number of workers registered in Northern Ireland under the unemployment insurance acts. Hours and minimum wage rates are set by the linen trade board.

Hours of labor.—At the close of 1932 the normal working week consisted of 47 hours, the normal hours for Saturday being 4½ and for other week days 8½. Hours in excess of these and all hours worked on Sunday or on any recognized public holiday are classed as overtime, and must be paid for at extra rates.

Wage rates.—For the purpose of fixing wage rates, Northern Ireland is regarded as consisting of two districts—the first comprising the county borough of Belfast and regions not more than 30 miles by rail from Belfast, while the second comprises all other regions. Table 21 shows the minimum time rates per hour for each district separately. The rates given for lappers, measurers, and sample makers are for workers who have served an apprenticeship of five years.

TABLE 21.—MINIMUM HOURLY WAGE RATES OF MALE WORKERS IN THE LINEN INDUSTRY OF NORTHERN IRELAND, 1932

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Class of worker	Belfast district			Other localities		
	British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate
Lappers	8. d.	Cents	Cents	8. d.	Cents	Cents
	1 2	28	19	1 0 $\frac{3}{4}$	26	17
Measurers and sample makers	1 2 $\frac{1}{2}$	29	20	1 1 $\frac{1}{4}$	27	18
Apprentices (lapping, measuring, and sample making):						
First year	0 23 $\frac{1}{2}$	5	3	0 2 $\frac{1}{4}$	5	3
Second year	0 2 $\frac{3}{4}$	6	5	0 2 $\frac{1}{2}$	5	3
Third year	0 3 $\frac{1}{2}$	7	5	0 3 $\frac{1}{4}$	7	4
Fourth year	0 4 $\frac{5}{8}$	9	6	0 4 $\frac{1}{4}$	9	6
Fifth year	0 7	14	10	0 6 $\frac{1}{2}$	13	9
Workers in Swiss embroidery branch:						
First 6 months	0 3	6	4	0 3	6	4
Second 6 months	0 6	12	8	0 6	12	8
Third 6 months	0 10	20	14	0 10	20	14

For male timeworkers other than those shown in the table, minimum hourly rates range in Belfast from 2 $\frac{5}{8}$ d. (at par 5 cents; at exchange rate, 4 cents) for workers under 15 with no experience to 9 $\frac{3}{4}$ d. (at par 20 cents; at exchange rate 13 cents) for those aged 21 and over with at least two years' experience in the trade within the last five years; in other localities the range is from 2d to 9d. with the same qualifications.

Basic piece rates.—For male pieceworkers other than lappers, measurers, sample makers, and machine operators in the Swiss embroidery branch the basic hourly rate is 10 $\frac{1}{4}$ d. (at par, 21 cents; at exchange rate, 14 cents) in the Belfast district and 9 $\frac{1}{2}$ d. (at par, 19 cents; at exchange rate, 13 cents) elsewhere. For machine operators in the Swiss embroidery branch the rate both in Belfast and elsewhere is 10 $\frac{1}{2}$ d. per hour (at par, 21 cents; at exchange rate, 14 cents) on 4 $\frac{3}{4}$ -yard, 3-tier, and 6 $\frac{3}{4}$ -yard machines; 11 $\frac{1}{2}$ d. (at par, 23 cents; at exchange rate, 16 cents) on 4 $\frac{3}{4}$ -yard, 4-tier machines; and 1s. 0 $\frac{1}{2}$ d. (at par, 25 cents; at exchange rate, 17 cents) on two 4 $\frac{3}{4}$ -yard, 2-tier machines, coupled.

For female workers aged 18 years and over, the minimum time rate is 6d. (at par, 12 cents; at exchange rate, 8 cents) per hour, unless the worker is classed as a learner, in which case she receives 2 $\frac{3}{4}$ d. for the first three months, 3 $\frac{1}{2}$ d. for the second, 4 $\frac{3}{8}$ d. for the third, and 5d. for the fourth. Learners under 18 receive an initial hourly rate based on their age at entrance with an increase for each 6 months of employment until they reach 18 and the 6d. an hour rate. Female workers under 18 who are not learners are paid in the same way, but their initial rate is slightly higher than in the case of learners. The piecework basic rate for female workers, other than home workers, is 6 $\frac{1}{2}$ d. (at par, 13 cents; at exchange rate, 9 cents) an hour.

Overtime rates.—The general overtime rate is time and a half, but for any time worked on Sundays or publicly recognized holidays double time must be paid. The general overtime rates are payable on any day (other than Sunday or a publicly recognized holiday)

when the number of hours worked exceeds 8½, or, in the case of Saturday, 4½, even though the number of hours worked in the week does not exceed 47. Piece workers receive a proportionate addition to their basic rates for all overtime worked.

Rope and Twine

Beginning at 2½d. per hour for boys under 15, time rates for male workers rise gradually, reaching their maximum when the worker attains the age of 21. For those under 18, rates are uniform regardless of occupation, but from 18 onward there are variations according to the work done. Table 22 shows the hourly time and piece rates for male workers in the Belfast district; in other localities the rates are uniformly ½d. lower.

TABLE 22.—HOURLY WAGE RATES OF MALE WORKERS IN THE ROPE AND TWINE INDUSTRY OF NORTHERN IRELAND

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December 1932, of shilling=16.4 cents, penny=1.37 cents]

Occupation	Rates for timeworkers 21 years and over			Piecework basic rates per hour		
	British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate
	d.	Cents	Cents	s. d.	Cents	Cents
Hand dressers, hemp	11	22	15	1 0	24	16
Charge hands	11	22	15	1 0	24	16
Piecers-out	10½	21	14	11½	23	16
Rope makers	10½	21	14	11½	23	16
Hand spinners	10¼	21	14	11¼	23	15
Hemp cutters	10	20	14	11	22	15
Line and cord makers	9¾	20	13	10¾	22	15
Rope layers (house machines)	9½	19	13	10½	21	14
Rope formers (house machines)	9	18	12	10	20	14
All other male workers	8½	17	12	9½	19	13

For female workers aged 18 and over, the time rates per hour in the Belfast district range from 4½d. (at par, 9 cents; at exchange rate, 6 cents) for doffers and 5d. for layers to 6½d. for reelers and warpers, and 6½d. (at par, 13 cents; at exchange rate, 9 cents) for sample makers, house-machine minders, and net-making machine operators. The most diversified group of workers, including ballers, carders, sop winders, drawers, etc., are paid 6d. (at par, 12 cents; at exchange rates 8 cents) per hour. Piecework basic time rates are a halfpenny per hour higher than the straight time rates. In localities other than the Belfast district both time and piece work basic rates are uniformly a halfpenny per hour lower than in the Belfast district.

Boot and Shoe Industry

Recognized time rates.—Both employers and employees in the boot and shoe industry are strongly federated, and wages are determined by joint agreement. For time workers wages vary according to sex and age, men reaching the standard adult rate at 22 years and women at 20 years. The recognized rates, up to and including these ages, are as follows:

TABLE 23.—WEEKLY WAGE RATES IN THE BOOT AND SHOE INDUSTRY OF GREAT BRITAIN, 1932, BY AGE AND SEX

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Age	Rate for males			Rate for females		
	British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate
15 years.	12 6	\$3.04	\$2.05	11 6	\$2.80	\$1.89
16 years.	17 6	4.26	2.87	15 6	3.77	2.54
17 years	20 6	4.99	3.36	19 6	4.74	3.20
17 years 6 months	23 0	5.60	3.77	21 0	5.11	3.44
18 years	26 0	6.33	4.26	23 0	5.60	3.77
18 years 6 months	28 6	6.93	4.67	25 9	6.27	4.22
19 years	32 0	7.79	5.25	28 6	6.93	4.67
19 years 6 months	34 6	8.39	5.66	31 0	7.54	5.08
20 years	38 6	9.37	6.31	33 0	8.03	5.41
20 years 6 months	43 6	10.58	7.13	—	—	—
21 years	48 6	11.80	7.95	—	—	—
21 years 6 months	51 0	12.41	8.36	—	—	—
22 years	54 0	13.14	8.86	—	—	—

Piecework earnings.—Piece rates are fixed at a figure intended to secure to the average worker earnings at least 25 per cent above the minimum time rates. Data were obtained showing the actual earnings of pieceworkers in a representative East Midlands factory during a standard week of 48 hours, late in 1931, and the range of these earnings is given in Table 24:

TABLE 24.—HIGHEST AND LOWEST EARNINGS OF MALE PIECEWORKERS, BY OCCUPATION, IN REPRESENTATIVE BRITISH SHOE FACTORY, WEEK ENDING SEPTEMBER 30, 1931

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Operation	Highest earnings			Lowest earnings		
	British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate
Clinkers	106 3	\$25.85	\$17.43	83 10	\$20.40	\$13.75
Lasting	81 1	19.73	13.30	60 9	14.78	9.96
Pulling over	77 5	18.84	12.70	60 0	14.60	9.84
Pounding up	74 3	18.07	12.18	69 6	16.91	11.40
Blake sewing	87 9	21.35	14.39	84 6	20.56	13.86
Leveling	72 10	17.72	11.95	55 9	13.56	9.14
Heeling	89 11	21.88	14.75	68 9	16.73	11.28
Edge trimming	119 4	29.03	19.57	82 9	20.13	13.57
Edge setting	112 6	27.37	18.45	99 9	24.27	16.36

In addition to the above there were four operations performed by male workers for which only one figure showing earnings could be obtained. Weekly earnings for these operations were as given in Table 25.

TABLE 25.—EARNINGS IN FOUR SPECIFIED OCCUPATIONS IN A BRITISH SHOE FACTORY, WEEK ENDING SEPTEMBER, 30, 1931

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Operation	British currency	United States currency		
		At par	At ex- change rate	
Welt sewing	8. d.	111 6	\$27.13	\$18.29
Rounding		129 0	31.39	21.16
Stitching		74 9	18.19	12.26
Heel paring		122 11	30.00	20.16

In this factory fitting cutters were on a weekly wage of 56s. (at par, \$13.62; at exchange rate, \$9.18).

Hours worked and earnings.—Actual earnings were obtained also for female pieceworkers engaged on standard operations, but in this case overtime had been worked, so Table 26 shows, by operations, the hours worked and the highest and lowest earnings made during the week.

TABLE 26.—HOURS AND HIGHEST AND LOWEST EARNINGS PER WEEK OF FEMALE PIECEWORKERS IN BOOT AND SHOE INDUSTRY OF GREAT BRITAIN, 1931

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Operation	Hours worked	Highest earnings			Hours worked	Lowest earnings			
		British currency	United States currency			British currency	United States currency		
			At par	At ex- change rate			At par	At ex- change rate	
Skiving	8. d.	54 $\frac{1}{4}$	63 5	\$15.43	\$10.40	53 $\frac{1}{4}$	46 1	\$11.21	\$7.56
Perforating		53	66 11	16.28	10.97	53	51 10	12.62	8.50
Folding		54 $\frac{1}{4}$	62 4	15.17	10.22	54 $\frac{1}{4}$	52 4	12.73	8.58
Stitching vamps		53	62 7	15.23	10.26	53	49 1	11.94	8.05
Stitching linings		54 $\frac{1}{4}$	48 3	11.74	7.91	50	35 4	8.60	5.79
Stitching galoshes		53	59 4	14.44	9.73	53	48 10	11.88	8.01
Stitching other portions of uppers		52 $\frac{1}{2}$	57 2	13.91	9.38	51 $\frac{1}{2}$	46 3	11.25	7.59

Hours, overtime rates, and holidays.—The standard hours are 48 a week. Overtime is paid for at time and a quarter. Employers and workers make equal contributions to a holiday fund, the amount being 1s. 2d. (at par, 28.4 cents; at exchange rate, 19.1 cents) in the case of adult men, with smaller amounts for women and juveniles. Withdrawal of small fixed amounts are made for the Easter and Whitsun holidays, and larger amounts for the longer holidays taken in August and at Christmas.

Changes in average earnings.—Changes in the number employed and in the average earnings per worker for a week ending approximately October 22d in each of the last four years are shown in Table 27:

TABLE 27.—NUMBERS EMPLOYED AND AVERAGE EARNINGS IN THE BOOT AND SHOE INDUSTRY OF GREAT BRITAIN DURING SPECIFIED WEEK

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Week ending approximately Oct. 22—	Numbered employed	Average earnings		
		British currency	United States currency	
			At par	At ex-change rate
1929.....	60,803	8. 4	\$11.03	
1930.....	63,832	44 1	10.73	
1931.....	59,567	44 0	10.71	\$7.22
1932.....	57,944	41 5½	10.09	6.80

Pottery Industry

Hours of labor.—In general, the hours of labor in a standard week in the pottery industry are 47, exclusive of mealtimes and overtime. For enginemen and stokers, wage rates are based on a week of 48 hours, and are subject to reduction when the hours in any week are less than 48.

Wages.—The British pottery industry employs more than 70,000 workers, considerably over half of them being women and girls. To a large extent piece rates prevail, and though both workers and employers are strongly organized, these rates differ so materially from factory to factory, according to product and to methods employed, that it is practically impossible to secure any definite information as to the customary or average rates. In February, 1931, the associated manufacturers in the industry gave notice of their intention to change the agreements as to wages and trade usages so as to reduce wage rates. The operatives responded by a similar notice demanding an increase in rates and various changes in trade usages. After a bitter dispute, in which the parties were unable to come to an agreement, the matter was referred to arbitrators, who gave an award effective from the first settling day in May. By this the wages of all operatives in all sections of the industry were reduced 10 per cent, except that it was provided that the cut should not operate to bring the wages of certain classes below specified minimum figures. The classes affected by this proviso, and the minimum wage established for each, are shown in Table 28:

TABLE 28.—MINIMUM WEEKLY TIME RATES FOR SPECIFIED CLASSES OF BRITISH POTTERY WORKERS, AGED 21 YEARS AND OVER

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Class of workers	British currency	United States currency	
		At par	At exchange rate
Male workers:			
Enginemen.....	52 6	\$12.75	\$8.61
Stokers.....	47 6	11.56	7.79
Laborers.....	43 0	10.46	7.05
Female workers:			
Warehouse workers in all sections.....	25 0	6.08	4.10
Electrical fittings section:			
Pressers, fettlers, dippers, cleaners, printers, decorators, and trans-ferrers.....	25 6	6.20	4.18
Glost and biscuit placers, working with men in placing houses.....	27 0	6.57	4.43
Dipping-house workers (except dippers, scourers, and electrical ware cleaners).....	27 0	6.57	4.43
Earthenware potters' attendants and tile-trade attendants:			
Mold-runners (18 and over).....	19 0	4.62	3.12
Other potters' and tile-trade attendants.....	25 0	6.08	4.10
Enamelers and gilders.....	1 7½	.15	.10
Litho transmitters.....	1 6¾	.14	.09

¹ Minimum hourly rate.

Lower rates are provided for female workers under 21 in most of the above classes, and for female apprentices. Lower rates are also provided for male laborers under 21.

Overtime.—The overtime rate is time and a quarter.

Average earnings.—Table 29, based on figures published in the Ministry of Labor Gazette, shows the number of employees at work, and the average earnings for each of two specified weeks:

TABLE 29.—NUMBER EMPLOYED AND AVERAGE EARNINGS OF POTTERY WORKERS IN SPECIFIED WEEKS

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Branch of industry	Week ending Oct. 24, 1931				Week ending Oct. 22, 1932				
	Number of workers	Average earnings			Number of workers	Average earnings			
		British currency	United States currency			British currency	United States currency		
			At par	At exchange rate			At par	At exchange rate	
China manufacture.....	1,598	s. d.	\$8.98	\$6.05	1,589	s. d.	\$9.05	\$6.10	
Earthenware manufacture.....	6,797	32 4½	7.88	5.31	6,958	33 11¾	8.27	5.57	
Other branches.....	1,676	33 6½	8.16	5.50	1,597	35 8	8.68	5.85	
Total.....	10,071	33 3	8.09	5.45	10,126	34 9	8.45	5.70	

Table 30 shows the trend of average earnings in the pottery industry since 1929:

TABLE 30.—AVERAGE EARNINGS IN THE POTTERY INDUSTRY FOR WEEK ENDING APPROXIMATELY OCTOBER 22, 1929 TO 1932

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Branch of industry	1929		1930		1931		1932		
	British currency	United States currency at par	British currency	United States currency at par	British currency	United States currency		British currency	United States currency
						At par	At exchange rate		
China manufacture.....	8. 40	11 $\frac{3}{4}$	\$9.97	36 10 $\frac{1}{2}$	\$8.97	36 11	\$8.98	\$6.05	37 2 $\frac{1}{2}$
Earthenware.....	39	1 $\frac{3}{4}$	9.52	37 3	9.07	32 4 $\frac{1}{2}$	7.88	5.31	33 11 $\frac{3}{4}$
Other branches.....	38	8	9.41	36 9 $\frac{1}{2}$	8.95	33 6 $\frac{1}{2}$	8.16	5.50	35 8
Total.....	39	3	9.55	37 1	9.03	33 3	8.09	5.45	34 9
								8.46	5.70

Building Trades

Hours of labor.—The customary hours of labor in a full week, exclusive of mealtimes and overtime, are 46 $\frac{1}{2}$ throughout the period during which the so-called statutory "summer time," or daylight saving time, is in force and 44 for the rest of the year. In a number of cases, however, the 44-hour week prevails throughout the entire year, and in a few towns special arrangements for other hours during the whole or part of the year have been made by agreement between employers and workers.

Wages.—Rates are established by the National Joint Council for the building industry, except in the case of Liverpool and Birkenhead, where local agreements prevail, and in a few towns where plasterers' rates have been fixed by special agreement between the unions and the master plasterers' association. For purposes of rate fixing, towns are divided into 10 grades, London being graded by itself apart from the other 10, and the rate paid depends upon the grade into which the town falls.

Table 31 gives the minimum hourly rates in London and certain English towns, and in Glasgow.

TABLE 31.—MINIMUM HOURLY WAGE RATES IN THE BUILDING TRADES, 1932¹
[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Class of workers	London				Birmingham, Bristol, Manchester, Leeds, and Newcastle				Glasgow			
	British currency	United States currency		British currency	United States currency		British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate
Bricklayers and masons.....	s. d.	Cents	Cents	s. d.	Cents	Cents	s. d.	Cents	Cents	s. d.	Cents	Cents
Carpenters, joiners, and plumbers.....	1 7 $\frac{1}{2}$	40	27	1 6	37	25	1 6 $\frac{3}{4}$	38	26	1 6 $\frac{1}{2}$	38	25
Painters.....	1 7 $\frac{1}{2}$	40	27	1 6	37	25	1 6 $\frac{1}{2}$	38	25	1 6 $\frac{1}{2}$	38	25
Structural-iron workers.....	1 6 $\frac{1}{2}$	38	25	1 6	37	25	1 6 $\frac{1}{2}$	38	25	1 6 $\frac{1}{2}$	38	25
Concrete workers.....	1 6	37	25	1 5	34	23	1 3 $\frac{1}{2}$	31	21	1 3 $\frac{1}{2}$	31	21
Electrical fitters.....	1 9 $\frac{3}{4}$	44	30	1 6 $\frac{3}{4}$	38	26	1 6	37	25	1 6	37	25
Laborers.....	1 2 $\frac{1}{4}$	30	20	1 1 $\frac{1}{4}$	28	19	1 2	28	19	1 2	28	19

¹From International Labor Review, July, 1932, corrected for reduction in February, 1932.

Overtime.—Rates paid for overtime are one and one-fourth times the ordinary rates for the first two hours, one and one-half times for the third and fourth hour, and twice the ordinary rates for time over four hours.

Relative wage levels at end of 1931.—The method of obtaining these is explained by the Ministry of Labor as follows:

On the basis of the unweighted averages of the standard rates of wages in 39 of the largest towns, the average increases in hourly and weekly rates at the end of December, 1931, of the principal classes of adult workmen, were shown in the following table. The weekly rates shown have been computed by multiplying the hourly rates by the number of hours constituting a full ordinary week (averaging approximately 49½ in 1914 and 44½ at December, 1931), both the summer and winter hours being taken into account for this purpose.

TABLE 32.—RELATIVE LEVEL OF WAGE RATES IN THE BUILDING TRADES IN GREAT BRITAIN, 1914 AND 1931

Occupation	Average (unweighted) of recognized wage rates in large towns					
	Hourly rates			Weekly rates		
	Aug. 4, 1914	Dec. 31, 1931	Per cent of in- crease, Aug. 4, 1914, to Dec. 31, 1931	Aug. 4, 1914	Dec. 31, 1931	Per cent of in- crease, Aug. 4, 1914, to Dec. 31, 1931
Bricklayers	d.	d.	s. d.	s. d.	s. d.	70
Masons	9.9	18.6	88	40 7	69 1	75
Carpenters and joiners	9.8	18.6	90	39 7	69 2	73
Plumbers	9.6	18.6	93	39 8	69 0	74
Plasterers	9.7	18.8	93	40 0	69 11	75
Painters	8.8	18.5	110	36 3	68 6	89
Laborers	6.6	13.9	112	27 0	51 10	92

Reduction in wage rates in 1932.—In publishing the above table, the Ministry of Labor calls attention to the fact that "in 35 of the 39 towns of which account has been taken in the compilation of these averages, rates of wages for building-trade operatives have been reduced as from February 1, 1932, by a halfpenny per hour for craftsmen and by a halfpenny or a farthing (generally a halfpenny) per hour for laborers."

Engineering and Shipbuilding

Hours.—In general, the standard week consists of 47 hours, exclusive of overtime and mealtimes. Overtime on both the day and the night shifts is paid at time and a quarter for the first two hours, and at time and a half after that.

Relative level of wage rates 1914 and 1931.—The Ministry of Labor gives the following figures relating to wage rates in the trades grouped under this heading:

TABLE 33.—RELATIVE LEVELS OF WAGE RATES IN ENGINEERING AND SHIPBUILDING OCCUPATIONS IN GREAT BRITAIN, 1914 AND 1931

Occupation	Average (unweighted) of recognized weekly time rates in princi- pal centers		Average per cent of increase, Aug. 4, 1914, to Dec. 31, 1931
	Aug. 4, 1914	Dec. 31, 1931	
Engineering:			
Fitters and turners.....	8. 38	8. 59	52
Iron molders.....	8. 41	8. 62	50
Pattern makers.....	8. 42	8. 63	51
Laborers.....	8. 22	8. 42	84
Shipbuilding:			
Shipwrights.....	8. 41	8. 59	45
Ship joiners.....	8. 40	8. 59	50
Laborers.....	8. 22	8. 40	79

Concerning these figures the following statement is made:

The above figures relate to a full ordinary week of 53 hours in some districts and 54 in others in 1914, and of 47 hours generally at December, 1931. The corresponding increase in hourly rates thus ranges from about 70 per cent for skilled workers to about 105 per cent for laborers in the engineering trade, and from about 65 to 70 per cent for skilled men to nearly 105 per cent for laborers in the shipbuilding trades.

In the case of pieceworkers the general advance over pre-war rates in the engineering industry amounts to 10 per cent on basic piece rates, plus a flat rate advance of 10 shillings a week. In the shipbuilding industry the general advance is 10 per cent on basic piece rates; at the end of December, 1931, a flat rate advance of 3 shillings and 6 pence per week, which has since been withdrawn, was also paid. In addition special advances have been granted to particular sections of workers.

Minimum time and piece rates.—Table 34, showing minimum hourly wage rates for timeworkers and minimum time rates for pieceworkers in mechanical engineering trades in certain selected cities, was given in the International Labor Review for July, 1932, and is based on comprehensive returns obtained from its members by the Engineering and Allied Employers National Federation:

TABLE 34.—MINIMUM HOURLY WAGE RATES IN THE ENGINEERING TRADES,
OCTOBER, 1931[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents;
average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Class of worker	London			Birmingham			Bristol			Leeds		
	British currency	United States currency		British currency	United States currency		British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate
Timeworkers: ¹												
Fitters	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.
	1 4	32	22	1 2 ³ / ₄	30	20	1 3	30	21	1 2 ¹ / ₂	29	20
Iron molders												
	1 4	32	22	1 3 ¹ / ₄	31	21	1 2 ³ / ₄	30	20	1 3 ¹ / ₄	31	21
Pattern makers												
	1 5 ¹ / ₄	35	24	1 3 ³ / ₄	32	22	1 3 ¹ / ₄	31	21	1 3 ¹ / ₂	31	21
Laborers												
	11 ¹ / ₂	23	16	10 ³ / ₄	22	15	10 ¹ / ₂	21	14	10 ³ / ₄	22	15
Pieceworkers (basic time rates): ²												
Fitters	1 6 ³ / ₄	38	26	1 5 ¹ / ₄	35	24	1 5 ¹ / ₂	35	24	1 5	34	23
Iron molders												
	1 6 ³ / ₄	38	26	1 5 ³ / ₄	36	24	1 4 ¹ / ₄	33	22	1 6 ¹ / ₂	38	25
Pattern makers												
	1 8 ¹ / ₄	41	28	1 6 ¹ / ₂	38	25	1 6 ¹ / ₄	37	25	1 6 ¹ / ₄	37	25
Laborers												
	1 1 ¹ / ₄	27	18	1 0 ¹ / ₂	25	17	11 ³ / ₄	24	16	1 0 ¹ / ₂	25	17
Class of worker	Manchester				Newcastle				Glasgow			
	British currency	United States currency			British currency	United States currency			British currency	United States currency		
		At par	At exchange rate	At par		At exchange rate	At par	At exchange rate		At par	At exchange rate	
Timeworkers: ¹	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.
Fitters	1 2 ³ / ₄	30	20	1 2 ³ / ₄	30	20	1 3	30	21	1 3	30	21
Iron molders												
	1 4	32	22	1 3 ¹ / ₄	31	21	1 4 ¹ / ₂	33	23	1 4 ¹ / ₂	33	23
Pattern makers												
	1 3 ³ / ₄	32	22	1 3 ³ / ₄	32	22	1 4 ¹ / ₂	33	23	1 4 ¹ / ₂	33	23
Laborers												
	10 ¹ / ₄	21	14	11	22	15	11	22	15	11	22	15
Pieceworkers (basic time rates): ²												
Fitters	1 5 ¹ / ₄	35	24	1 5 ¹ / ₄	35	24	1 5 ¹ / ₂	35	24	1 5 ¹ / ₂	35	24
Iron molders												
	1 6 ³ / ₄	38	26	1 5 ³ / ₄	36	24	1 7 ¹ / ₂	40	27	1 7 ¹ / ₂	40	27
Pattern makers												
	1 6 ¹ / ₂	38	25	1 6 ¹ / ₂	38	25	1 7 ¹ / ₂	40	27	1 7 ¹ / ₂	40	27
Laborers												
	11 ¹ / ₂	23	16	1 0 ¹ / ₂	25	17	1 0 ¹ / ₂	25	17	1 0 ¹ / ₂	25	17

¹ Predominant rates plus bonus of 12s. (at par, \$2.92; at exchange rate, \$1.97) a week.² Estimated for workers of average ability.

Average hourly earnings.—From the same source comes Table 35, which shows the average hourly earnings in the engineering trades in seven cities in the autumn of 1931.

TABLE 35.—AVERAGE HOURLY EARNINGS IN THE ENGINEERING TRADES, OCTOBER, 1931

[Conversions into United States currency on basis of par value of shilling=24.33 cents, penny=2.03 cents; average exchange rate for December, 1932, of shilling=16.4 cents, penny=1.37 cents]

Class of worker	London			Birmingham			Bristol			Leeds		
	British currency	United States currency		British currency	United States currency		British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate
Timeworkers:	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.
Fitters	1 5½	35	24	1 5	34	23	1 3½	31	21	1 3½	31	21
Turners	1 5½	35	24	1 4	32	22	1 3	30	21	1 3	30	21
Iron molders	1 4½	33	23	1 3½	31	21	1 2¾	30	20	1 4½	33	23
Pattern makers	1 6½	37	25	1 5½	35	24	1 5½	35	24	1 4½	33	23
Laborers	1 1½	27	18	1 1½	23	16	1 1¼	23	15	1 1½	23	16
Pieceworkers:												
Fitters	1 8	41	27	1 7¾	40	27	1 6½	38	25	1 4½	33	23
Turners	1 9½	44	30	1 6	37	25	1 5¼	35	24	1 4¼	33	22
Iron molders	1 6½	38	25	1 6¼	37	25	1 4	32	22	1 6½	38	25
Pattern makers	1 8½	42	28	1 8	41	27	—	—	—	1 4½	33	23
Laborers	1 2	28	19	1 2¼	29	19	—	—	—	1 2¼	29	19
	Manchester				Newcastle				Glasgow			
Class of worker	British currency	United States currency		British currency	United States currency		British currency	United States currency		British currency	United States currency	
		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate		At par	At exchange rate
Timeworkers:	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.	s. d.	Cts.	Cts.
Fitters	1 3½	31	21	1 3¾	32	22	1 4	32	22	1 4½	32	22
Turners	1 3½	31	21	1 3¾	32	22	1 4	32	22	1 5	34	23
Iron molders	1 4½	33	23	1 3¾	32	22	1 5	34	22	1 6½	38	23
Pattern makers	1 4½	33	23	1 4½	33	22	1 5	34	22	1 6½	38	23
Laborers	11	22	15	1 1½	24	16	1 1½	23	16	1 1½	23	16
Pieceworkers:												
Fitters	1 6	37	25	1 6¾	38	26	1 5½	35	25	1 6½	38	25
Turners	1 6	37	25	1 6	37	25	1 6½	38	25	1 7	39	26
Iron molders	1 7½	39	26	1 8	41	27	1 7	39	27	1 8	41	27
Pattern makers	1 7	39	26	1 6½	37	25	1 8	41	25	1 8	41	27
Laborers	1 0½	25	17	1 1	26	18	1 2	28	18	1 2	28	19

Agriculture

UNDER the agricultural wages (regulation) act of 1924, an agricultural wages board was established to fix minimum rates of wages for male and female adult workers (21 years of age and over, and 18 years of age and over, respectively) in England and Wales. No statutory minimum rates have been fixed for Scotland. Local bodies set wages for specified districts, which are usually, though not always, coterminous with counties, and should either side be dissatisfied with their decision an appeal may be made to the wages board. On June 1, 1932, the minimum weekly rates for adult men ranged from 30s. to 32s. 6d. (at par, \$7.30 to \$7.91; at exchange rate, \$4.92 to \$5.33) in 35 districts; in six districts they were below 30s., the lowest rate being 28s. in Suffolk and Oxfordshire, and in eight districts they were higher, the highest being 37s. 6d. in northern and eastern Lancashire. The usual rates for women were 5d. and 6d. (at par, 10 and 12 cents; at exchange rate, 7 and 8 cents) an hour, which apply in nearly all dis-

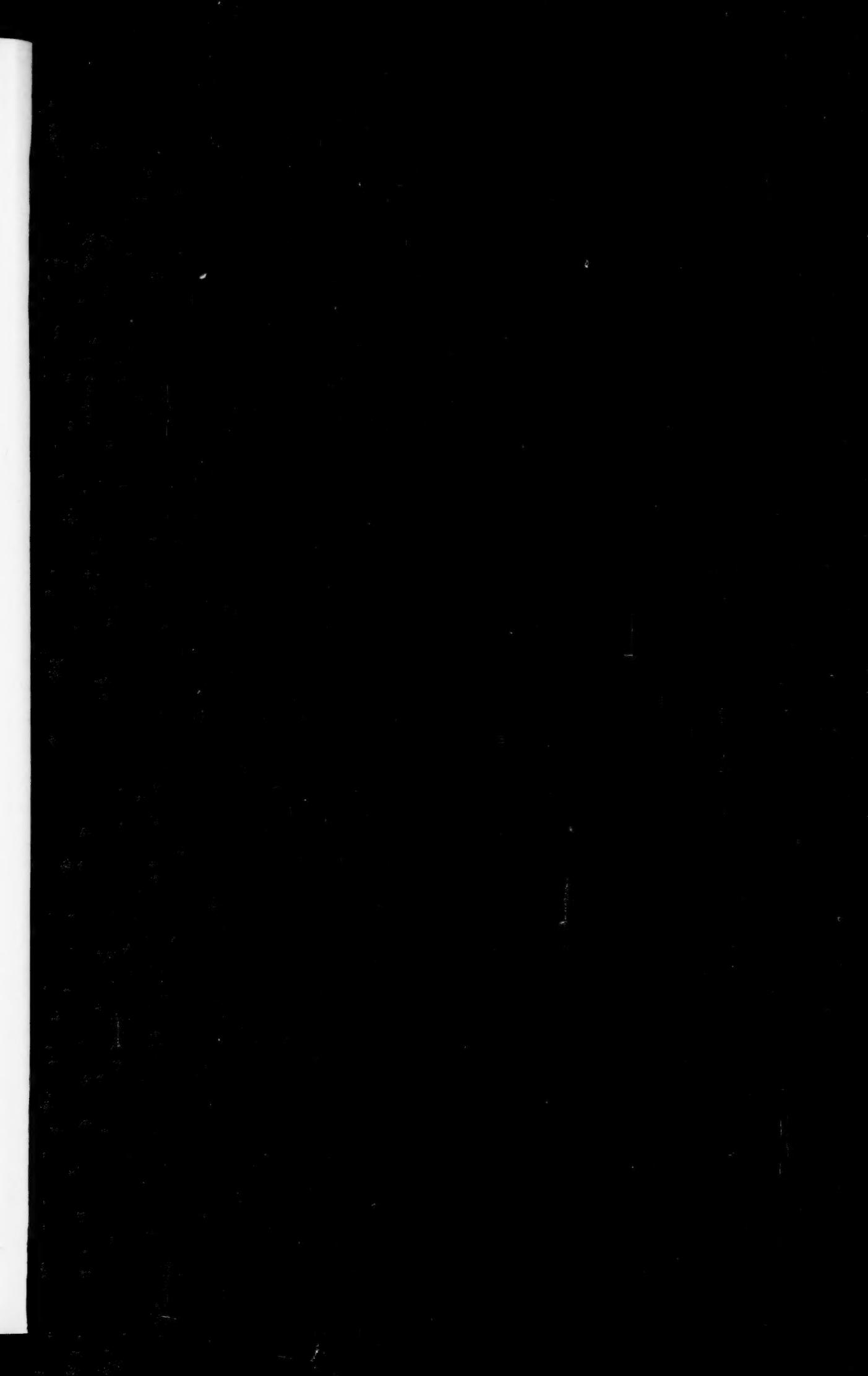


TABLE 35.—AVERAGE HOURLY EARNINGS IN THE ENGINEERING TRADES, OCTOBER, 1931

[Conversions into United States currency on basis of par value of shilling = 24.33 cents, penny = 2.03 cents; average exchange rate for December, 1932, of shilling = 16.4 cents, penny = 1.37 cents]

Agriculture

Under the agricultural wages (regulation) act of 1924, an agricultural wages board was established to fix minimum rates of wages for male and female adult workers (21 years of age and over, and 18 years of age and over, respectively) in England and Wales. No statutory minimum rates have been fixed for Scotland. Local bodies set wages for specified districts, which are usually, though not always, coterminous with counties, and should either side be dissatisfied with their decision an appeal may be made to the wages board. On June 1, 1932, the minimum weekly rates for adult men ranged from 30s. to 32s. 6d. (at par, \$7.30 to \$7.91; at exchange rate, \$4.92 to \$5.33) in 35 districts; in six districts they were below 30s., the lowest rate being 28s. in Suffolk and Oxfordshire, and in eight districts they were higher, the highest being 37s. 6d. in northern and eastern Lancashire. The usual rates for women were 5d. and 6d. (at par, 10 and 12 cents; at exchange rate, 7 and 8 cents) an hour, which apply in nearly all dis-

tricts. Normal hours range from 48 to 60 a week, the latter being found in the Lancashire districts where a relatively high minimum wage is in effect. The working week is often from two to four or five hours shorter in winter than in summer time.

Allowances in the way of housing, rent allowances, and foodstuffs are valued by the wages board or local committees, and their cash value may be deducted from the minimum rates established.

Actual earnings.—A report recently issued by the Ministry of Agriculture and Fisheries stated that particulars obtained from farms investigated by inspectors, though not necessarily representative of conditions generally prevailing, give an indication that earnings for the year ending September 30, 1931, average about 33s. 8d. (at par, \$8.20; at exchange rate, \$5.52) per week for ordinary workers; for horsemen, about 37s. 5d. (at par, \$9.10; at exchange rate, \$6.14); and for stockmen about 39s. 1d. (at par, \$9.51; at exchange rate, \$6.41). No later information is available. At that time there had been no material change in the average earnings as compared with the previous year.

Overtime and holidays.—Overtime rates of pay for agricultural workers vary in the different districts from 7½d. to 1s. (at par, 15 to 24 cents; at exchange rate, 10 to 16 cents) per hour. There are no provisions, legislative or by agreement, for holidays with pay. Individual instances are doubtless numerous, but do not represent the situation of the majority.

Wages and Hours of Labor in Canada, 1931 and 1932

THE following statistics are taken from a report on wages and hours of labor in Canada, 1930, 1931, and 1932, published as a supplement to the January, 1933, issue of the Canadian Labor Gazette (Ottawa):

TABLE 1.—INDEX NUMBERS OF RATES OF WAGES OF VARIOUS CLASSES OF LABOR IN CANADA, 1922 TO 1932

[1913=100]

Industry	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Building trades ¹	162.5	166.4	169.7	170.4	172.1	179.3	185.6	197.5	203.2	195.7	178.2
Metal trades ²	173.7	174.0	175.5	175.4	177.4	178.1	180.1	184.6	186.6	182.9	174.7
Printing trades ³	192.3	188.9	191.9	192.8	193.3	195.0	198.3	202.3	203.3	205.1	194.2
Electric railway ⁴	184.4	186.2	186.4	187.8	188.4	189.9	194.1	198.6	199.4	192.4	180.7
Steam railway ⁵	184.4	186.4	186.4	186.4	186.4	198.4	198.4	204.3	204.3	199.2	183.9
Coal mining ⁶	197.8	197.8	192.4	167.6	167.4	167.9	168.9	168.9	169.4	169.4	164.0
Simple average	182.4	183.3	183.7	179.7	180.5	184.3	187.6	192.7	194.4	190.8	179.3
Common factory labor ⁷	183.0	181.7	183.2	186.3	187.3	187.7	187.1	187.8	188.2	183.4	173.6
Miscellaneous factory trades ⁸	189.1	196.1	197.6	195.5	196.7	199.4	200.9	202.1	202.3	197.3	184.3
Logging and sawmilling	158.7	170.4	183.1	178.7	180.8	182.8	184.3	185.6	183.0	163.0	141.3

¹ 8 trades from 1922 to 1926, 9 for 1927 to 1932; 13 cities to 1927, 14 cities to 1932.

² 5 trades from 1922 to 1926, 4 for 1927 to 1932.

³ 4 trades for 1922, 6 from 1923 to 1932.

⁴ 5 classes.

⁵ Revised; for 1931 and 1932 the percentage changes in daily wages instead of hourly wages have been used for electric railways.

⁶ 23 classes.

⁷ Including a 10 per cent decrease for certain classes toward the end of the year.

⁸ 12 classes.

⁹ The number of samples has been increased each year since 1920.

Table 2 shows the rates of wages paid and hours worked in various occupations in six Canadian cities in 1931 and 1932:

TABLE 2.—RATES OF WAGES AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1931 AND 1932

Occupation	Toronto		Winnipeg		Vancouver	
	Wage rates	Hours per week	Wage rates	Hours per week	Wage rates	Hours per week
<i>Building trades</i>						
Bricklayers:						
1931	<i>Per hour</i>		<i>Per hour</i>		<i>Per hour</i>	
1931	\$1.10	44	\$1.35	44	\$1.35	40
1932	1.00	40	1.35	44	1.22½	40
Carpenters:						
1931	1.10	44	1.00	44	1.00	44
1932	.90	40	1.00	44	.87½	40-44
Electrical workers:						
1931	1.25	44	1.00	44	\$1.00-1.17½	40-44
1932	1.00	40	1.00	44	1.00	44
Painters:						
1931	\$0.75-.85	44	.85	44	.80	40-44
1932	.75-.82½	44	\$0.70-.80	44	.75	44
Plasterers:						
1931	1.12½	40	1.45	44	1.28½	40
1932	1.00	40	1.35	44	1.00-1.25	40
Plumbers:						
1931	1.25	40	1.15	44	1.12½	40
1932	1.00	40	1.15	44	1.00	40
Sheet-metal workers:						
1931	1.07½	44	.85	44	1.06¼	40-44
1932	.90	40	.85	44	1.00	40-44
Stonecutters:						
1931	1.25	44	1.15	44	1.25	40
1932	1.00	40	1.15	44	1.25	40
Laborers:						
1931	.40-.60	44-60	.40-.50	44-60	.50	44
1932	30-.50	40-48	.40-.50	44-60	.40-.50	40-44
<i>Street railways</i>						
Conductors and motormen:						
1931	.60	48	.60	42	.63	48
1932	.60	40-48	.58	42	.63	48
Linemen: ⁵						
1931	.72-.78	40-48	.92½	44	.69-.97	48
1932	.72-.78	36	.86	44	.69-.97	32
Shop and barn men: ⁶						
1931	.54-.81	37½-42	.42½-.75	42	.46-.75	44-48
1932	.54-.81	33	.40-.70	39-44	.46-.75	44-48
Electricians: ⁷						
1931	.60-.70	37½-42	.61-.75	42	.70-.75	44
1932	.60-.70	32-33	.57-.70	39-42	.70-.75	44
Trackmen and laborers:						
1931	.50-.59	40	.35-.45	44	.50-.59	44-48
1932	.50-.59	32	.40½	44	.50-.59	44-48
<i>Printing trades</i>						
Compositors, machine and hand, news:						
1931	<i>Per week</i>		<i>Per week</i>		<i>Per week</i>	
1931	47.50	46½	47.00	46	48.00	45
1932	47.50	46½	43.00	46	43.20	45
Compositors, machine and hand, job:						
1931	35.00-42.00	44-48	39.60	44-48	45.00	44-48
1932	35.00-40.00	44-48	39.60	44-48	40.50	44-48
Pressmen, news:						
1931	46.50	48	46.00	48	48.00	48
1932	46.50	48	42.00	48	43.20	48
Pressmen, job:						
1931	36.00-42.00	44-48	39.60	44-48	45.00	44-48
1932	33.00-40.00	44-48	39.60	44-48	40.50	44-48
Bookbinders:						
1931	36.00-40.00	44-48	35.00-40.00	44-48	38.50-45.00	44-48
1932	33.00-38.00	44-48	35.00-39.00	44-48	38.50-40.50	44-48
Bindery girls:						
1931	16.80-18.00	48	12.00-18.00	44-48	23.00	44-48
1932	15.00-18.00	44-48	10.00-18.00	44-48	16.00-20.25	44-48

Footnotes at end of table.

TABLE 2.—RATES OF WAGES AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1931 AND 1932—Continued

Occupation	Quebec		Montreal		Ottawa	
	Wage rates	Hours per week	Wage rates	Hours per week	Wage rates	Hours per week
<i>Building trades</i>						
Bricklayers:						
1931	\$1.00	44-54	\$1.00-\$1.20	44	\$1.25	44
1932	\$0.90-1.00	44-54	.75	44	\$1.00-1.12½	44
Carpenters:						
1931	.50-.60	44-54	.65-.85	44-55	.90	44
1932	.50-.55	48-54	.60	44-55	.80	44
Electrical workers:						
1931	.50-.65	44-54	.75-.90	44-46½	.80	44
1932	.50-.60	48	.75	44	.70-.80	44
Painters:						
1931	.50-.60	44-54	.65-.85	44-49½	.70	44
1932	.50-.60	48-52	.65	44-49½	.65	44
Plasterers:						
1931	1.00	44-54	.85-1.05	44-49½	1.00	44
1932	.90-1.00	44-48	.85	44-49½	.85	44
Plumbers:						
1931	.50-.60	44-54	.90	44	1.05	44
1932	.50-.60	44-48	.75	44	.92½	44
Sheet-metal workers:						
1931	.50-.60	44-54	.80	44	1.00	44
1932	.50-.60	44-49½	.65	44	.90	44
Stonecutters:						
1931	.60-.80	44-55	.75-1.00	44	1.05	44
1932	.60-.80	44-48	.75-1.00	44	.90	44
Laborers:						
1931	.30-.45	44-60	.30-.40	44-60	.45-.50	44-54
1932	.30-.40	44-54	.30-.40	44-60	.40-.45	44-54
<i>Street railways</i>						
Conductors and motormen:						
1931 ¹	2.50	60	.55	70	2.49	49½
1932 ¹	2.50	60	.55	40	2.49	49½
Linemen: ²						
1931	.45-.50	49½-65	.51-.55	48	.48-.56	48
1932	.45-.50	54-65	.51-.55	40	.35-.53	48
Shop and barnmen: ³						
1931	.34-.62	44	.38-.62	45-67	.39½-.50	48
1932	.34-.62	40-57	.38-.62	45-62	.35-.50	48
Electricians:						
1931	.54-.64	44	.55-.65	45	.40½-.61	48
1932	.56-.64	40	.55-.65	40-45	.39½-.61	48
Trackmen and laborers:						
1931	.35	60	.35	48	.38½-.49	48
1932	.35	60	.35	48	.38½-.49	48
<i>Printing trades</i>						
Compositors, machine and hand, news:						
1931	Per week 32.50	48	Per week 38.00-44.00	48	Per week 44.00	46½
1932	32.50	48	38.00-44.00	48	44.00	46½
Compositors, machine and hand, job:						
1931	32.50	48	36.00-42.00	44-48	35.00-40.00	44-48
1932	32.50	48	32.40-38.00	44-48	35.00-40.00	44-48
Pressmen, news:						
1931	33.00	48	35.00-40.00	48	43.00	48
1932	29.70-32.00	48	35.00-40.00	48	38.70	48
Pressmen, job:						
1931	28.00-37.00	48	36.00-40.00	48	35.00-40.00	44-48
1932	28.00-32.50	48	32.00-36.00	44-48	35.00-40.00	44-48
Bookbinders:						
1931	27.00-35.00	48	33.75	48	35.00-37.00	48
1932	25.00-32.50	43-48	30.00-33.75	48	33.00-36.00	48
Bindery girls:						
1931	9.00-15.00	48	15.00	48	13.50	48
1932	9.00-12.00	43-48	12.50-15.00	48	13.50	48

¹ Maximum rates.² 1-man car operators, 5 cents extra per hour.³ 1-man car operators, 5½ cents extra per hour.⁴ 1-man car operators, 6 cents extra per hour.⁵ Including troublemen, and groundmen in some cases; in some localities line maintenance work is performed by employees of light, heat and power distribution utilities.⁶ Including shedmen, pitmen, cleaners, blacksmiths, carpenters, painters, etc.⁷ Including armature winders, wiremen, etc.⁸ 1-man car operators, 5 cents extra per hour. Payment for actual time worked with a minimum of 8½ hours per day instead of 9 hours as formerly, most runs being less than 9 hours, resulting in a 10 per cent reduction in earnings. In other classes daily earnings were reduced 10 per cent and hours to 8 per day.

Rates of wages paid to certain groups of railroad employees are shown in Table 3:

TABLE 3.—RATES OF WAGES OF CANADIAN STEAM-RAILROAD EMPLOYEES, 1927-1928 AND 1929-1932

Occupation	Train service (cents per mile)		Occupation	Engine service (cents per mile)	
	1927-1928	1929-1932 ¹		1927-1928	1929-1932 ¹
Conductors:			Locomotive engineers:		
Passenger.....	4.47	4.47-4.72	Passenger.....	6.16-7.16	6.16-7.16
Freight, through.....	6.16	6.16-6.25	Freight.....	6.84-8.76	6.84-8.76
Freight, way.....	6.68	6.68-7.11	Locomotive firemen:		
Brakemen:			Passenger.....	4.56-5.76	4.56-5.76
Passenger.....	3.13	3.13-3.18	Freight.....	5.00-6.51	5.00-6.51
Freight, through.....	4.84	4.84-4.91			
Freight, way.....	5.24	5.24-5.31			

¹ Employees reduced 10 per cent from December 1, 1931.

In Table 4 daily wages in coal mining in Canada for 1930-1931 and 1932 are presented. The 8-hour day prevailed except for surface laborers, machinists, carpenters, and blacksmiths in Nova Scotia, whose day was 8½ hours.

TABLE 4.—WAGES IN COAL MINING IN CANADA, 1930-1931 AND 1932

Locality and occupation	Daily wages ¹		Locality and occupation	Daily wages ¹	
	1930-31	1932		1930-31	1932
<i>Nova Scotia²</i>					
Contract miners.....	³ \$6.70	³ \$5.80	Bratticemen.....	\$5.20-5.57	\$5.20-5.57
Hand miners.....	⁴ 4.15	⁴ 3.74	Pumpmen.....	4.40-4.95	4.40-4.95
Hoisting engineers.....	4.25	3.83	Laborers, underground.....	4.40-4.67	4.40-4.67
Drivers.....	3.60	3.25	Laborers, surface.....	4.15-4.41	4.15-4.41
Bratticemen.....	3.73	3.36	Machinists.....	4.85-5.77	4.85-5.77
Pumpmen.....	3.93	3.54	Carpenters.....	5.45-5.77	5.45-5.77
Laborers, underground.....	3.45	3.25	Blacksmiths.....	5.45-5.77	5.45-5.77
Laborers, surface.....	3.40	3.25	<i>Vancouver Island⁴</i>		
Machinists.....	4.15	3.74	Contract miners.....	6.82	6.40
Carpenters.....	3.88	3.49	Machine miners.....	4.81	4.81
Blacksmiths.....	4.05	3.65	Hand miners.....	4.52	4.52
<i>Alberta⁵</i>			Hoisting engineers.....	5.39	5.39
Contract miners.....	7.69	7.61	Drivers.....	4.13	4.13
Machine miners.....	5.85-7.00	5.85-7.00	Bratticemen.....	4.35	4.35
Hand miners.....	5.20-5.57	5.20-5.57	Pumpmen.....	3.96	3.96
Hoisting engineers.....	5.65-6.20	5.65-6.20	Laborers, underground.....	3.97	3.97
Drivers.....	4.85-5.25	4.85-5.25	Laborers, surface.....	3.76	3.76
			Machinists.....	5.40	5.40
			Carpenters.....	4.83	4.83
			Blacksmiths.....	5.11	5.11

¹ Some engineers, pumpmen, firemen, etc., work 7 days per week.

² In Nova Scotia in most of the mines from Feb. 1, 1928 to Jan. 31, 1930, a bonus to be paid quarterly based on profits was agreed upon.

³ Average earnings per day on contract, per ton, etc.

⁴ Minimum rate per day when not working on contract, per ton, yard, etc.

⁵ Including also 3 mines in southeastern British Columbia.

⁶ No figures for Chinese employees included.

Wage Deductions in Germany, January, 1933¹

THE following tables show examples of deductions from wages for various taxes and assessments, by groups of manual workers and salaried employees in Germany.

In regard to the taxes and other assessments quoted in the tables the following explanation is given:

Sickness insurance covers wage earners and salaried employees, the latter contributing on their salaries up to 3,600 marks (\$856.80)² per annum. Wage earners contribute on the amount of their earnings up to 70 marks (\$16.66) per week. Earnings above that sum are not considered.

Old age and invalidity insurance consists of two separate systems, one for wage earners and one for salaried employees.

The contributions by wage earners are graduated according to seven wage classes, the lowest including wage earners whose weekly wages are up to 6 marks (\$1.43) and the highest including those whose wages amount to 36 marks (\$8.57) and over. The lowest class contributes 0.30 mark (7.14 cents) per week and the highest class 2 marks (48 cents) per week.

The contributions of salaried employees are graduated according to 10 salary classes. The lowest class includes those whose monthly salary is not over 50 marks (\$11.90). Their monthly contribution is 2 marks (48 cents). The highest class of compulsorily insured includes those whose monthly salary is over 600 marks (\$142.80). Their contribution amounts to 30 marks (\$7.14) per month.

Unemployment insurance covers both wage earners and salaried employees. The contribution is assessed according to a scale of wages and salaries. For cases in which the scale is not applicable the contribution amounts to 6½ per cent of the income.

The relief tax is separate and distinct from unemployment insurance contributions and is paid by both wage earners and salaried employees for the purpose of providing funds out of which the emergency relief payments are made to those unemployed workers who have exhausted their unemployment insurance benefit.

Income tax is paid by both wage earners and salaried employees, and is deducted from the wages or salaries by the employer every month. The normal rate is 10 per cent. Certain allowances are made for dependents. If the wage or salary is more than 8,000 marks (\$1,904) per annum, the portion above 8,000 marks is assessed at the rates for assessed incomes.

Tax on unmarried is levied upon single persons, including widows, widowers, or separated persons provided that there are no children. This tax amounts to 10 per cent of the income tax.

Poll tax is collected by the local governments for local purposes and varies by localities, minimum rates being fixed by the Federal Government.

Church tax is a local tax paid by the members of churches. It is 10 per cent of the amount of the income tax. It is not assessed upon nonmembers of the church.

In regard to deductions from the earnings of salaried employees it is to be noted that the deductions in percentage of salaries are higher on the lower earnings than on the higher earnings.

¹ Report of C. W. Gray, United States vice consul at Berlin, Germany, Jan. 17, 1933.
² Conversions into United States currency on basis of mark at par = 23.8 cents.

TABLE 1.—DEDUCTIONS FROM MONTHLY WAGES OR SALARIES OF WAGE EARNERS AND SALARIED EMPLOYEES WITHOUT DEPENDENTS

Wage earners

[Conversions into United States currency on basis of mark at par=23.8 cents]

Taxes and other assessments	Deductions from monthly ¹ wages of—							
	126.30 marks (\$30)		189.45 marks (\$45)		252.60 marks (\$60)		294.70 marks (\$70)	
	German currency	United States currency	German currency	United States currency	German currency	United States currency	German currency	United States currency
Sickness insurance	<i>Marks</i> 5.37	<i>United States currency</i> \$1.28	<i>Marks</i> 8.06	<i>United States currency</i> \$1.92	<i>Marks</i> 10.74	<i>United States currency</i> \$2.56	<i>Marks</i> 13.43	<i>United States currency</i> \$3.20
Old-age and invalidity insurance	3.32	.79	4.42	1.05	4.42	1.05	4.42	1.05
Unemployment insurance	4.03	.96	6.04	1.44	8.06	1.92	10.07	2.40
Relief tax	1.86	.44	4.65	1.11	6.20	1.48	7.75	1.84
Income tax	2.50	.60	8.50	2.02	15.00	3.57	19.00	4.52
Tax on unmarried					1.50	.36	1.90	.45
Poll tax	2.50	.60	2.50	.60	2.50	.60	2.50	.60
Church tax	.25	.06	.85	.20	1.50	.36	1.90	.45
Total deductions	19.83	4.72	35.02	8.33	49.92	11.88	60.97	14.51
Per cent of wages		15.0		18.0		19.0		20.6

Salaried employees

	Deductions from monthly ¹ salaries of—			
	252.60 marks (\$60)	315.75 marks (\$75)	421.00 marks (\$100)	526.25 marks (\$125)
Sickness insurance	10.74	\$2.56		
Old-age and invalidity insurance	6.00	1.43	8.00	\$1.90
Unemployed insurance	8.06	1.92	10.07	2.40
Relief tax	6.20	1.48	8.35	1.99
Income tax	15.00	3.57	21.50	5.12
Tax on unmarried	1.50	.36	2.15	.51
Poll tax	2.50	.60	2.50	.60
Church tax	1.50	.36	2.15	.51
Total deductions	51.50	12.26	54.72	13.02
Per cent of salaries		20.0		17.3
			18.0	
			18.4	

¹ Month=31 days.

TABLE 2.—DEDUCTIONS FROM MONTHLY WAGES OR SALARIES OF WAGE EARNERS AND SALARIED EMPLOYEES WITH DEPENDENTS

Wage earners with monthly¹ wages of 252.60 marks (\$60)

[Conversions into United States currency on basis of mark=23.8 cents]

Taxes and other assessments	Deductions of wage earner or salaried employee with—							
	Wife		Wife and 1 child		Wife and 2 children		Wife and 3 children	
	German currency	United States currency	German currency	United States currency	German currency	United States currency	German currency	United States currency
Sickness insurance			<i>Marks</i>	<i>Marks</i>	<i>Marks</i>	<i>Marks</i>		
Old-age and invalidity insurance	10.74	\$2.56	10.74	\$2.56	10.74	\$2.56	10.74	\$2.56
Unemployment insurance	4.42	1.05	4.42	1.05	4.42	1.05	4.42	1.05
Relief tax	8.06	1.92	8.06	1.92	8.06	1.92	8.06	1.92
Income tax	6.20	1.48	6.20	1.48	6.20	1.48	6.20	1.48
Poll tax	10.50	2.50	9.00	2.14	7.85	1.87	5.25	1.25
Church tax	2.50	.60	2.50	.60	2.50	.60	2.50	.60
	1.05	.25	.90	.21	.75	.18	.50	.12
Total deductions	43.47	10.35	41.82	9.95	40.52	9.64	37.67	8.97
Per cent of wages	17.0		16.0		16.0		14.9	

Wage earners with monthly¹ wages of 294.70 marks (\$70)

Sickness insurance	13.43	\$3.20	13.43	\$3.20	13.43	\$3.20	13.43	\$3.20
Old-age and invalidity insurance	4.42	1.05	4.42	1.05	4.42	1.05	4.42	1.05
Unemployment insurance	10.07	2.40	10.07	2.40	10.07	2.40	10.07	2.40
Relief tax	7.75	1.84	7.75	1.84	7.75	1.84	7.75	1.84
Income tax	14.10	3.36	12.20	2.90	10.30	2.45	8.25	1.96
Poll tax	2.50	.60	2.50	.60	2.50	.60	2.50	.60
Church tax	1.40	.33	1.20	.29	1.00	.24	.80	.19
Total deductions	53.67	12.77	51.57	12.27	49.47	11.77	47.22	11.24
Per cent of wages	18.0		17.5		16.7		16.0	

Salaried employees with monthly¹ salaries of 252.60 marks (\$60)

Sickness insurance	10.74	\$2.56	10.74	\$2.56	10.74	\$2.56	10.74	\$2.56
Old-age and invalidity insurance	6.00	1.43	6.00	1.43	6.00	1.43	6.00	1.43
Unemployment insurance	8.06	1.92	8.06	1.92	8.06	1.92	8.06	1.92
Relief tax	6.20	1.48	6.20	1.48	6.20	1.48	6.20	1.48
Income tax	10.50	2.50	9.00	2.14	7.85	1.87	5.25	1.25
Poll tax	2.50	.60	2.50	.60	2.50	.60	2.50	.60
Church tax	1.05	.25	.90	.21	.75	.18	.50	.12
Total deductions	45.05	10.72	43.40	10.33	42.10	10.02	39.25	9.34
Per cent of salary	17.8		17.1		16.6		15.5	

Salaried employees with monthly¹ salaries of 315.75 marks (\$75)

Old-age and invalidity insurance	8.00	\$1.90	8.00	\$1.90	8.00	\$1.90	8.00	\$1.90
Unemployment insurance	10.07	2.40	10.07	2.40	10.07	2.40	10.07	2.40
Relief tax	8.35	1.99	8.35	1.99	8.35	1.99	8.35	1.99
Income tax	16.35	3.89	14.20	3.38	12.05	2.87	9.90	2.36
Poll tax	2.50	.60	2.50	.60	2.50	.60	2.50	.60
Church tax	1.60	.38	1.40	.33	1.20	.29	.95	.23
Total deductions	46.87	11.16	44.52	10.60	42.17	10.04	39.77	9.47
Per cent of salary	14.8		14.1		13.3		12.6	

¹ Month=31 days.

Weekly Earnings in Various Industries in Poland in May, 1932

THE following table shows average weekly earnings of workers, by wage groups and by age and sex, in various industries in Poland in May, 1932.¹

WEEKLY EARNINGS OF WORKERS IN VARIOUS INDUSTRIES IN POLAND IN MAY, 1932

[Conversion into United States currency on basis of zloty at par = 11.2 cents]

Industry and group of workers	Number of workers covered	Per cent whose weekly earnings were—								
		Under 10 zloty (\$1.12 to \$2.24)	10 to 19.90 zloty (\$1.12 to \$3.36)	20 to 29.99 zloty (\$2.24 to \$3.36)	30 to 39.99 zloty (\$3.36 to \$4.48)	40 to 49.99 zloty (\$4.48 to \$5.60)	50 to 59.99 zloty (\$5.60 to \$6.72)	60 to 69.99 zloty (\$6.72 to \$7.84)	70 to 79.99 zloty (\$7.84 to \$8.96)	80 zloty (\$8.96) and over
Leather:										
Adult males	3,265	2.0	12.4	23.3	30.2	17.3	6.9	3.3	1.7	2.9
Adult females	639	10.6	40.8	38.2	6.6	3.6	.2	—	—	—
Young workers	69	24.6	68.1	5.8	1.5	—	—	—	—	—
Total	3,973	3.8	18.0	25.4	25.9	14.8	5.7	2.7	1.4	2.3
Tanning:										
Adult males	2,877	1.5	11.1	23.0	32.2	17.9	7.0	3.5	1.7	2.1
Adult females	395	8.1	42.8	43.3	5.3	.5	—	—	—	—
Young workers	25	28.0	52.0	16.0	4.0	—	—	—	—	—
Total	3,297	2.5	15.2	25.4	28.8	15.6	6.2	3.0	1.5	1.8
Paper, cardboard, cellulose:										
Adult males	6,152	2.9	16.5	22.4	20.7	16.3	10.0	5.9	2.8	2.5
Adult females	1,738	24.4	45.8	25.3	3.6	.7	.2	—	—	—
Young workers	80	46.2	28.7	21.3	3.8	—	—	—	—	—
Total	7,970	8.1	23.0	23.1	16.8	12.7	7.8	4.5	2.1	1.9
Paper and cardboard products:										
Adult males	680	3.7	16.6	21.3	21.6	10.3	6.6	6.5	4.1	9.3
Adult females	2,047	16.8	50.4	20.6	7.3	4.1	.6	.1	—	.1
Young workers	114	43.0	53.5	3.5	—	—	—	—	—	—
Total	2,841	14.7	42.4	20.1	10.4	5.4	2.0	1.7	1.0	2.3
Chemical industry:										
Adult males	19,062	1.7	7.1	16.5	20.0	18.5	14.1	9.3	5.9	6.9
Adult females	8,075	8.5	46.4	30.8	11.5	2.2	.5	.1	—	—
Young workers	412	28.4	57.3	12.4	1.9	—	—	—	—	—
Total	27,549	4.1	19.3	20.7	17.2	13.4	9.9	6.5	4.1	4.8
Gas works:										
Adult males	1,957	1.3	2.0	5.1	13.0	18.0	15.2	13.8	9.6	22.0
Adult females	37	10.8	21.6	21.2	40.6	8.1	—	2.7	—	—
Young workers	45	51.1	40.0	6.7	2.2	—	—	—	—	—
Total	2,039	2.5	3.2	5.3	13.3	17.4	14.6	13.3	9.3	21.1
Oil refining:										
Adult males	3,255	1.9	6.1	15.0	23.2	22.6	15.1	7.9	4.2	4.0
Adult females	126	11.1	41.3	42.8	3.2	1.6	—	—	—	—
Young workers	15	—	93.3	6.7	—	—	—	—	—	—
Total	3,396	2.2	7.8	16.0	22.3	21.7	14.5	7.6	4.0	3.9
Match factories:										
Adult males	278	4.7	7.6	33.5	25.5	18.7	6.1	1.1	1.4	1.4
Adult females	535	2.4	76.3	20.7	.6	—	—	—	—	—
Young workers	1	—	100.0	—	—	—	—	—	—	—
Total	814	3.2	52.8	25.0	9.1	6.4	2.1	.4	.5	.5

¹ Poland. Central Statistical Office. *Wiadomosci Statystyczne*, Jan. 25, 1933, pp. 51, 52.

TREND OF EMPLOYMENT

February 1933

THE Bureau of Labor Statistics of the United States Department of Labor presents in the following tables data compiled from pay-roll reports supplied by cooperating establishments in 17 of the important industrial groups of the country and covering the pay period ending nearest the 15th of the month.

Information for each of the 89 separate manufacturing industries and for the manufacturing industries combined is shown, following which are presented tabulations showing the changes in employment and pay rolls in the 16 nonmanufacturing groups included in the Bureau's monthly survey, together with information available concerning employment in the executive civil service and on class I railroads.

Employment in Selected Manufacturing Industries in February 1933

Comparison of Employment and Pay-Roll Totals in February 1933 with January 1933 and February 1932

EMPLOYMENT in manufacturing industries increased 1.6 percent in February 1933 as compared with January 1933, and pay-roll totals increased 1.7 percent over the month interval. Comparing February 1933 with February 1932, decreases of 12.3 percent in employment and 26.6 percent in pay rolls are shown over the 12-month period.

The percents of change in employment and pay-roll totals in February 1933 as compared with January 1933 are based on returns made by 17,773 establishments in 89 of the principal manufacturing industries in the United States, having in February 2,593,672 employees, whose combined earnings in one week were \$42,885,896.

The index of employment in February 1933 was 57.5 as compared with 56.6 in January 1933, 58.3 in December 1932, and 65.6 in February 1932; the pay-roll index in February 1933 was 36.4 as compared with 35.8 in January 1933, 37.7 in December 1932, and 49.6 in February 1932. The 12-month average for 1926 equals 100.

In table 1, which follows, are shown the number of identical establishments reporting in both January and February 1933 in the 89 manufacturing industries, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest February 15, the amount of their weekly earnings in February, the percents of change over the month and year intervals, and the indexes of employment and pay roll in February 1933.

The monthly percents of change for each of the 89 separate industries are computed by direct comparison of the total number of employees and of the amount of weekly pay roll reported in identical establishments for the two months considered. The percents of

change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The percents of change over the year interval in the separate industries, in the groups and in the totals, are computed from the index numbers of employment and pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN FEBRUARY 1933 WITH JANUARY 1933 AND FEBRUARY 1932

Industry	Establishments reporting in both Jan. and Feb. 1933	Employment			Pay-roll totals			Index numbers Feb. 1933 (average 1926=100)	
		Number on pay roll Feb. 1933	Percent of change		Amount of pay roll (1 week) Feb. 1933	Percent of change			
			Jan. to Feb. 1933	Feb. 1932 to Feb. 1933		Jan. to Feb. 1933	Feb. 1932 to Feb. 1933	Employment	Pay-roll totals
Food and kindred products.									
Baking	2,996	233,171	-1.7	-4.6	\$4,664,216	-3.2	-17.4	77.4	60.1
Beverages	955	60,216	-4	-7.5	1,298,470	-2.1	-18.7	77.0	62.1
Butter	317	9,210	+2.0	-10.1	221,374	+.6	-18.0	64.8	49.7
Confectionery	289	4,867	+.5	+5.7	102,115	-3.1	-13.6	89.0	68.8
Flour	315	33,712	-1.1	+1.3	448,038	-2.6	-16.4	75.5	52.6
Ice cream	424	15,650	-1.4	-3.9	314,926	-6.9	-14.3	81.0	61.9
Slaughtering and meat packing	381	10,636	+.7	-0.8	267,154	-1.0	-25.8	61.7	46.6
Sugar, beet	241	86,641	+.2	-5.8	1,749,377	-1.8	-16.8	84.6	65.9
Sugar refining, cane	59	4,348	-57.1	+91.8	83,272	-49.6	+10.2	49.1	33.6
	15	7,891	+3.2	-2.1	179,490	+2.7	-14.4	74.1	57.7
Textiles and their products.									
Fabrics:	3,078	634,295	+3.6	-4.0	7,882,179	+8.5	-20.5	72.1	45.8
Carpets and rugs	32	12,973	-3.2	-10.7	173,393	-6.4	-37.9	49.6	25.2
Cotton goods	673	230,848	-.6	-1.7	2,327,970	-.8	-17.9	74.3	48.0
Cotton small wares	113	9,394	+5.0	-8.8	139,821	+11.7	-24.4	79.8	56.8
Dyeing and finishing textiles	150	34,315	+1.1	-9.3	633,392	+8.0	-24.8	78.2	56.7
Knit goods	448	100,650	+.5	-2.3	1,224,695	+3.4	-21.0	79.7	50.1
Silk and rayon goods	242	45,021	-.2	-14.0	547,760	+1.9	-28.8	59.6	36.5
Woolen and worsted goods	239	58,953	+0.7	+6.1	951,630	+14.5	-9.9	78.3	57.1
Wearing apparel:									
Clothing, men's	368	61,908	+0.7	-5.0	964,157	+24.7	-18.2	68.2	39.1
Clothing, women's	440	27,481	+9.3	-6.6	483,233	+21.3	-23.8	69.5	42.2
Corsets and allied garments	33	5,837	+6.3	-2.8	87,473	+17.7	-15.5	102.6	80.7
Hats, fur-felt	35	5,387	+2.5	-.7	90,382	-4.3	-7.7	66.5	37.1
Men's furnishings	68	7,288	+2.6	-1.6	73,303	+5.2	-30.3	63.3	33.8
Millinery	121	9,403	+10.9	-12.2	140,705	+8.6	-34.4	72.0	43.2
Shirts and collars	116	14,837	+9.0	-4.3	144,265	+14.4	-17.7	58.2	34.5
Iron and steel and their products, not including machinery.									
Bolts, nuts, washers, and rivets	1,348	288,189	+4.7	-17.7	3,909,330	+8.4	-33.4	51.3	24.5
Cast-iron pipe	67	7,494	+1.9	-13.7	112,071	+5.5	-30.0	61.1	32.6
Cutlery (not including silver and plated cutlery) and edge tools	39	4,463	-13.3	-44.4	51,812	-14.8	-59.7	23.4	11.2
Forgings, iron and steel	121	7,873	+2.7	-20.2	134,240	+6.5	-33.3	59.3	37.6
Hardware	60	4,904	-2.9	-23.2	71,411	-7.9	-40.3	51.4	24.9
Iron and steel	100	20,411	+1.4	-16.2	257,029	+3.4	-35.6	49.0	23.2
Plumbers' supplies	190	177,531	+4.8	-15.6	2,363,018	+10.2	-31.2	53.0	23.6
Steam and hot-water heating apparatus and steam fittings	63	5,910	+23.6	-20.9	80,314	+33.9	-39.3	54.5	25.9
Stoves	97	13,441	+11.3	-22.7	209,405	+9.3	-35.9	34.8	18.2
Structural and ornamental metal work	154	13,533	+14.0	-15.0	216,026	+25.1	-24.4	43.0	23.2
Tin cans and other tinware	194	13,032	-2.2	-32.9	180,594	-6.2	-52.5	37.3	17.4
Tools (not including edge tools, machine tools, files, and saws)	60	8,215	+3.9	-3.4	148,664	-.1	-12.4	70.3	39.7
Wirework	125	6,539	-.3	-22.9	95,902	-7.1	-39.9	59.2	30.6
	64	4,843	+5.1	-12.9	78,844	+15.8	-31.2	89.1	58.6

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN FEBRUARY 1933 WITH JANUARY 1933 AND FEBRUARY 1932—Con.

Industry	Establishments reporting in both Jan. and Feb. 1933	Employment			Pay-roll totals			Index numbers Feb. 1933 (average 1926=100)	
		Number on pay roll Feb. 1933	Percent of change		Amount of pay roll (1 week) Feb. 1933	Percent of change			
			Jan. to Feb. 1933	Feb. 1932 to Feb. 1933		Jan. to Feb. 1933	Feb. 1932 to Feb. 1933	Employment	Pay-roll totals
Machinery, not including transportation equipment.									
Agricultural implements	1,805	269,793	+1.2	-26.6	\$4,802,053	+1.6	-40.0	43.9	25.4
Cash registers, adding machines, and calculating machines	79	7,583	+8.9	-27.8	120,454	+14.0	-38.8	29.9	21.6
Electrical machinery, apparatus and supplies	40	12,733	+.4	-19.1	281,659	-.5	-23.3	62.5	42.7
Engines, turbines, tractors, and water wheels	293	99,211	-.1	-34.5	1,932,281	-.4	-46.4	46.4	30.3
Foundry and machine-shop products	90	14,930	+.3	-23.1	291,226	+1.5	-29.0	40.0	24.7
Machine tools	1,060	94,453	+1.7	-22.7	1,471,076	+3.6	-38.1	42.3	21.6
Radios and phonographs	145	10,410	-2.3	-34.5	194,103	-3.7	-45.3	31.0	18.8
Textile machinery and parts	39	15,488	+6.9	-14.0	280,654	+8.6	-25.9	61.9	45.5
Typewriters and supplies	43	6,697	+1.0	-19.9	110,365	-3.3	-41.2	55.0	32.7
16	8,288	-6.3	-25.4	120,235	-9.1	-38.3	53.8	29.8	
Nonferrous metals and their parts.									
Aluminum manufactures	607	71,882	+1.4	-17.3	1,114,495	+1.7	-33.3	50.8	30.4
Brass, bronze, and copper products	24	4,881	+2.2	-13.2	79,060	+5.6	-24.7	47.8	20.6
Clocks and watches and time-recording devices	200	25,357	+.2	-19.9	380,654	-2.2	-38.9	48.7	26.5
Jewelry	23	4,477	-2.9	-30.5	57,191	-3.0	-41.3	38.0	22.3
Lighting equipment	139	6,841	+5.2	-20.5	114,872	+1.0	-39.0	34.8	21.1
Silverware and plated ware	54	2,688	-3.3	-20.8	46,347	-5.0	-31.4	60.5	40.4
Smelting and refining, copper, lead, and zinc	53	7,290	+6.6	-9.8	116,813	+6.0	-31.8	58.7	31.8
Stamped and enameled ware	30	8,015	-4.7	-19.1	132,381	-4.9	-31.8	55.9	35.0
84	12,333	+10.4	-7.8	187,177	+16.3	-25.4	60.5	35.9	
Transportation equipment.									
Aircraft	424	227,943	-2.0	-25.2	4,263,101	-10.3	-38.6	48.5	30.6
Automobiles	20	5,884	+1.7	-17.2	175,883	+3.6	-17.6	185.8	187.7
Cars, electric and steam railroad	242	192,021	-1.5	-24.4	3,487,789	-11.3	-38.1	50.8	31.3
Locomotives	41	4,745	-4.5	-19.2	76,784	-9.9	-34.3	17.2	9.0
Shipbuilding	14	2,008	-7.0	-44.1	39,084	-8.5	-57.5	11.8	7.6
98	23,195	-5.9	-32.1	483,561	-5.1	-44.2	61.1	43.4	
Railroad repair shops.									
Electric railroad	914	90,465	-1.7	-9.4	2,067,208	+.3	-15.7	47.3	35.9
Steam railroad	405	20,728	-.9	-10.2	526,806	-.7	-10.5	65.0	52.5
509	69,737	-1.8	-9.3	1,540,402	+.3	-15.4	45.9	34.6	
Lumber and allied products.									
Furniture	1,514	107,537	-1.5	-19.9	1,229,280	-.6	-36.7	33.4	16.2
Lumber, millwork	442	39,770	+2.2	-23.3	492,236	+7.1	-37.1	43.1	21.2
Lumber, sawmills	458	16,672	+2.8	-24.6	206,985	-2.7	-42.5	31.2	15.8
Turpentine and rosin	593	50,138	-4.0	-17.2	517,578	-4.7	-34.8	29.8	13.3
21	957	-5.9	-12.6	12,481	-12.8	-22.8	40.9	32.1	
Stone, clay, and glass products.									
Brick, tile, and terra cotta	1,365	74,517	+3.7	-23.4	1,150,042	+3.5	-38.1	36.7	20.8
Cement	665	13,192	+1.2	-34.2	142,230	+(¹)	-48.0	19.4	7.7
Glass	114	9,633	-.9	-31.4	145,296	-.8	-49.1	29.7	14.9
Marble, granite, slate, and other products	188	32,980	+4.4	-12.6	570,905	+3.6	-27.0	55.4	37.9
Pottery	217	4,357	+8.9	-31.7	82,084	+2.0	-45.8	36.6	21.3
121	14,355	+4.9	-16.8	209,437	+10.3	-35.7	57.5	31.0	
Leather and its manufactures.									
Boots and shoes	479	133,856	+5.5	-3.3	2,015,958	+14.4	-18.4	76.5	48.4
Leather	322	108,806	+6.3	-4.0	1,558,989	+17.3	-20.9	77.7	47.0
157	25,050	+2.2	-.1	456,969	+6.0	-9.7	71.6	53.1	

¹ Less than one tenth of 1 percent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN FEBRUARY 1933 WITH JANUARY 1933 AND FEBRUARY 1932—Con.

Industry	Establishments reporting in both Jan. and Feb. 1933	Employment			Pay-roll totals			Index numbers Feb. 1933 (average 1926=100)	
		Number on pay roll Feb. 1933	Percent of change		Amount of pay roll (1 week) Feb. 1933	Percent of change			
			Jan. to Feb. 1933	Feb. 1932 to Feb. 1933		Jan. to Feb. 1933	Feb. 1932 to Feb. 1933	Employment	Pay-roll totals
Paper and printing	1,898	206,545	-0.1	-8.1	\$4,868,489	-1.8	-31.0	78.1	61.2
Boxes, paper	305	19,576	+1.4	-6.9	330,631	+4.6	-17.5	68.3	53.7
Paper and pulp	402	76,195	+.4	-6.7	1,312,046	+3.4	-24.0	72.5	46.5
Printing and publishing:									
Book and Job	743	47,367	-1.0	-13.8	1,216,616	-4.6	-26.2	71.0	54.9
Newspapers and periodicals	448	63,407	-.4	-4.5	2,009,196	-2.9	-16.4	96.8	80.2
Chemicals and allied products	1,008	143,209	+1.7	-4.7	3,053,350	+.3	-15.4	76.5	59.7
Chemicals	117	20,837	+1.6	-2.4	486,871	+1.7	-13.2	86.8	61.4
Cottonseed, oil, cake, and meal	54	2,494	+11.1	-15.8	26,887	+2.9	-31.1	40.6	34.1
Druggists' preparations	39	6,534	-4.7	-10.5	129,786	-3.5	-13.8	70.5	70.0
Explosives	25	3,054	+.4	-9.6	54,933	+.9	-19.8	76.2	47.0
Fertilizers	206	7,991	+13.6	+.2	87,257	+.5	-19.3	56.7	32.6
Paints and varnishes	344	13,324	+1.0	-13.1	277,505	+3.0	-26.4	64.2	47.3
Petroleum refining	113	45,523	+1.0	-5.6	1,203,665	-.6	-14.4	62.7	53.0
Rayon and allied products	23	29,173	-.1	-.1	481,326	-2.0	-11.4	149.1	121.0
Soap	87	14,279	+.9	-1.5	305,117	+1.3	-13.0	95.1	78.0
Rubber products	151	70,600	+.6	-10.1	1,190,534	+.5	-29.5	62.6	36.8
Rubber boots and shoes	9	9,388	-4.3	-20.6	149,127	-4.0	-17.9	49.2	34.0
Rubber goods, other than boots, shoes, tires, and inner tubes	97	18,313	+.5	-2.8	310,837	-.2	-16.1	82.0	54.7
Rubber tires and inner tubes	45	42,899	+2.2	-10.9	730,570	+2.5	-37.2	58.6	32.3
Tobacco manufactures	246	51,670	+5.0	-11.5	585,661	+4.6	-24.8	65.5	42.8
Chewing and smoking tobacco and snuff	34	10,323	-.5	-3.1	126,238	-11.9	-19.4	89.5	65.4
Cigars and cigarettes	212	41,347	+5.9	-12.8	450,423	+8.5	-25.7	62.4	40.1
Total, 89 Industries	17,773	2,593,672	+1.6	-12.3	43,885,896	+1.7	-26.6	57.5	36.4

Per Capita Earnings in Manufacturing Industries

PER CAPITA weekly earnings in February 1933 for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics, and for all industries combined, together with the percents of change in February 1933 as compared with January 1933 and February 1932 are shown in table 2.

These earnings must not be confused with full-time weekly rates of wages. They are per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN FEBRUARY 1933 AND COMPARISON WITH JANUARY 1933 AND FEBRUARY 1932

Industry	Per capita weekly earnings in February 1933	Percent of change compared with—	
		January 1933	February 1932
Food and kindred products:			
Baking	\$21.56	-1.7	-12.5
Beverages	24.04	-1.3	-9.2
Butter	20.98	-3.7	-18.1
Confectionery	13.29	-1.5	-17.7
Flour	20.12	-5.6	-10.8
Ice cream	25.12	-1.6	-17.8
Slaughtering and meat packing	20.19	-2.0	-11.8
Sugar, beet	19.15	+17.4	-42.4
Sugar refining, cane	22.75	-4	-12.4
Textiles and their products:			
Fabrics:			
Carpets and rugs	13.37	-3.3	-22.8
Cotton goods	10.08	-2	-16.5
Cotton small wares	14.88	+6.4	-16.9
Dyeing and finishing textiles	18.46	+6.8	-17.1
Knit goods	12.17	+2.9	-19.0
Silk and rayon goods	12.17	+2.2	-16.9
Woolen and worsted goods	16.14	+4.3	-14.9
Wearing apparel:			
Clothing, men's	13.96	+13.7	-14.1
Clothing, women's	17.58	+10.9	-18.6
Corsets and allied garments	14.99	+10.8	-13.0
Hats, fur-felt	16.78	-6.6	-7.0
Men's furnishings	10.06	+2.4	-29.7
Millinery	14.96	-2.1	-25.3
Shirts and collars	9.72	+4.9	-13.4
Iron and steel and their products, not including machinery:			
Bolts, nuts, washers, and rivets	14.95	+3.5	-19.0
Cast-iron pipe	11.61	-1.7	-27.9
Cutlery (not including silver and plated cutlery) and edge tools	17.05	+3.7	-16.4
Forgings, iron and steel	14.56	-5.1	-22.3
Hardware	12.59	+1.9	-22.8
Iron and steel	13.31	+5.1	-18.9
Plumbers' supplies	13.59	+8.4	-23.2
Steam and hot-water heating apparatus and steam fittings	15.58	-1.8	-17.2
Stoves	15.96	+9.7	-11.2
Structural and ornamental metal work	13.86	-4.1	-29.0
Tin cans and other tinware	18.10	-3.8	-9.2
Tools (not including edge tools, machine tools, files, and saws)	14.67	-6.8	-21.8
Wirework	16.28	+10.2	-21.0
Machinery, not including transportation equipment:			
Agricultural implements	15.88	+4.7	-15.2
Cash registers, adding machines, and calculating machines	22.12	-9	-5.4
Electrical machinery, apparatus, and supplies	19.48	-2	-17.6
Engines, turbines, tractors, and water wheels	19.51	+1.2	-8.0
Foundry and machine-shop products	15.57	+1.8	-19.9
Machine tools	18.65	-1.4	-16.3
Radio and phonographs	18.12	+1.6	-13.4
Textile machinery and parts	16.48	-4.3	-26.5
Typewriters and supplies	14.51	-2.9	-17.4
Nonferrous metals and their parts:			
Aluminum manufactures	16.20	+3.3	-13.2
Brass, bronze, and copper products	15.01	-2.3	-23.7
Clocks and watches and time-recording devices	12.77	-1	-15.7
Jewelry	16.70	-4.1	-22.9
Lighting equipment	17.24	-1.7	-13.1
Silverware and plated ware	16.02	-6	-24.4
Smelting and refining—copper, lead, and zinc	16.52	-1	-15.6
Stamped and enameled ware	15.18	+5.4	-19.4
Transportation equipment:			
Aircraft	29.80	+1.9	-5
Automobiles	18.16	-10.0	-18.2
Cars, electric and steam railroad	16.18	-5.6	-18.7
Locomotives	18.63	-1.6	-24.5
Shipbuilding	20.85	+9	-17.7
Railroad repair shops:			
Electric railroad	25.42	+2	-10.4
Steam railroad	22.09	+2.1	-6.7
Lumber and allied products:			
Furniture	12.38	+4.8	-18.4
Lumber:			
Millwork	12.42	-5.3	-23.8
Sawmills	10.32	-8	-21.4
Turpentine and rosin	13.04	-7.4	-11.7

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN FEBRUARY 1933 AND COMPARISON WITH JANUARY 1933 AND FEBRUARY 1932—Con._s

Industry	Per capita weekly earnings in February 1933	Percent of change compared with—	
		January 1933	February 1932
Stone, clay, and glass products:			
Brick, tile, and terra cotta	\$10.78	-1.1	-20.6
Cement	15.08	+.1	-25.9
Glass	17.31	-.8	-16.8
Marble, granite, slate, and other products	18.84	-6.4	-20.8
Pottery	14.59	+5.2	-22.5
Leather and its manufactures:			
Boots and shoes	14.33	+10.4	-17.6
Leather	18.24	+3.7	-9.7
Paper and printing:			
Boxes, paper	16.89	+3.2	-11.0
Paper and pulp	17.22	+3.0	-18.6
Printing and publishing:			
Book and job	25.68	-3.6	-14.4
Newspapers and periodicals	31.69	-2.6	-12.6
Chemicals and allied products:			
Chemicals	23.37	+.1	-11.0
Cottonseed, oil, cake, and meal	10.78	-7.4	-18.8
Druggists' preparations	19.86	+1.3	-3.8
Explosives	17.99	+.5	-11.3
Fertilizers	10.92	-11.5	-19.1
Paints and varnishes	20.83	+2.0	-15.6
Petroleum refining	26.44	-1.6	-9.5
Rayon and allied products	16.50	-2.0	-11.5
Soap	21.37	+.4	-11.7
Rubber products:			
Rubber boots and shoes	15.88	+.3	+3.7
Rubber goods, other than boots, shoes, tires, and inner tubes	16.07	-.8	-13.7
Rubber tires and inner tubes	17.03	+.2	-29.5
Tobacco manufactures:			
Chewing and smoking tobacco and snuff	12.23	-11.5	-16.7
Cigars and cigarettes	11.11	+2.5	-14.8
Total, 89 industries	16.53	(1)	-16.3

¹ No change.

General Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

GENERAL index numbers of employment and pay-roll totals in manufacturing industries by months, from January 1926 to February 1933, together with average indexes for each of the years from 1926 to 1932, and for the months of January and February 1933 are shown in the following table. In computing these general indexes, the index numbers of each of the separate industries are weighted according to their relative importance in the total. Following this table are two charts prepared from these general indexes showing the course of employment and pay rolls for each of the years 1926 to 1932, inclusive, and for January and February 1933.

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING INDUSTRIES, JANUARY 1926 TO FEBRUARY 1933

[12-month average, 1926 = 100]

Month	Employment									Pay rolls								
	1926	1927	1928	1929	1930	1931	1932	1933	1926	1927	1928	1929	1930	1931	1932	1933		
January.....	100.4	97.3	91.6	95.2	90.7	74.6	64.8	56.6	98.0	94.9	89.6	94.5	88.1	63.7	48.6	35.8		
February.....	101.5	99.0	93.0	97.4	90.9	75.3	65.6	57.5	102.2	100.6	93.9	101.8	91.3	68.1	49.6	36.4		
March.....	102.0	99.5	93.7	98.6	90.5	75.9	64.5	57.5	103.4	102.0	95.2	103.9	91.6	69.6	48.2	35.8		
April.....	101.0	98.6	93.3	99.1	89.9	75.7	62.2	57.5	101.5	100.8	93.8	104.6	90.7	68.5	44.7	35.8		
May.....	99.8	97.6	93.0	99.2	88.6	75.2	59.7	57.5	99.8	99.8	94.1	104.8	88.6	67.7	42.5	35.8		
June.....	99.3	97.0	93.1	98.8	86.5	73.4	57.5	57.5	99.7	97.4	94.2	102.8	85.2	63.8	39.3	35.8		
July.....	97.7	95.0	92.2	98.2	82.7	71.7	55.2	55.2	95.2	93.0	91.2	98.2	77.0	60.3	36.2	35.8		
August.....	98.7	95.1	93.6	98.6	81.0	71.2	56.0	55.2	98.7	95.0	94.2	102.1	75.0	50.7	36.3	35.8		
September.....	100.3	95.8	95.0	99.3	80.9	70.9	58.5	55.2	99.3	94.1	95.4	102.6	75.4	56.7	38.1	35.8		
October.....	100.7	95.3	95.9	98.4	79.9	68.9	59.9	55.2	102.9	95.2	99.0	102.4	74.0	55.3	39.9	35.8		
November.....	99.5	93.5	95.4	95.0	77.9	67.1	59.4	55.2	99.6	91.6	96.1	95.4	89.6	52.5	38.6	35.8		
December.....	98.9	92.6	95.5	92.3	76.6	66.7	58.3	55.2	99.8	93.2	97.7	92.4	68.8	52.2	37.7	35.8		
Average....	100.0	96.4	93.8	97.5	84.7	72.2	60.1	57.1	100.0	96.5	94.5	100.5	81.3	61.5	41.6	36.1		

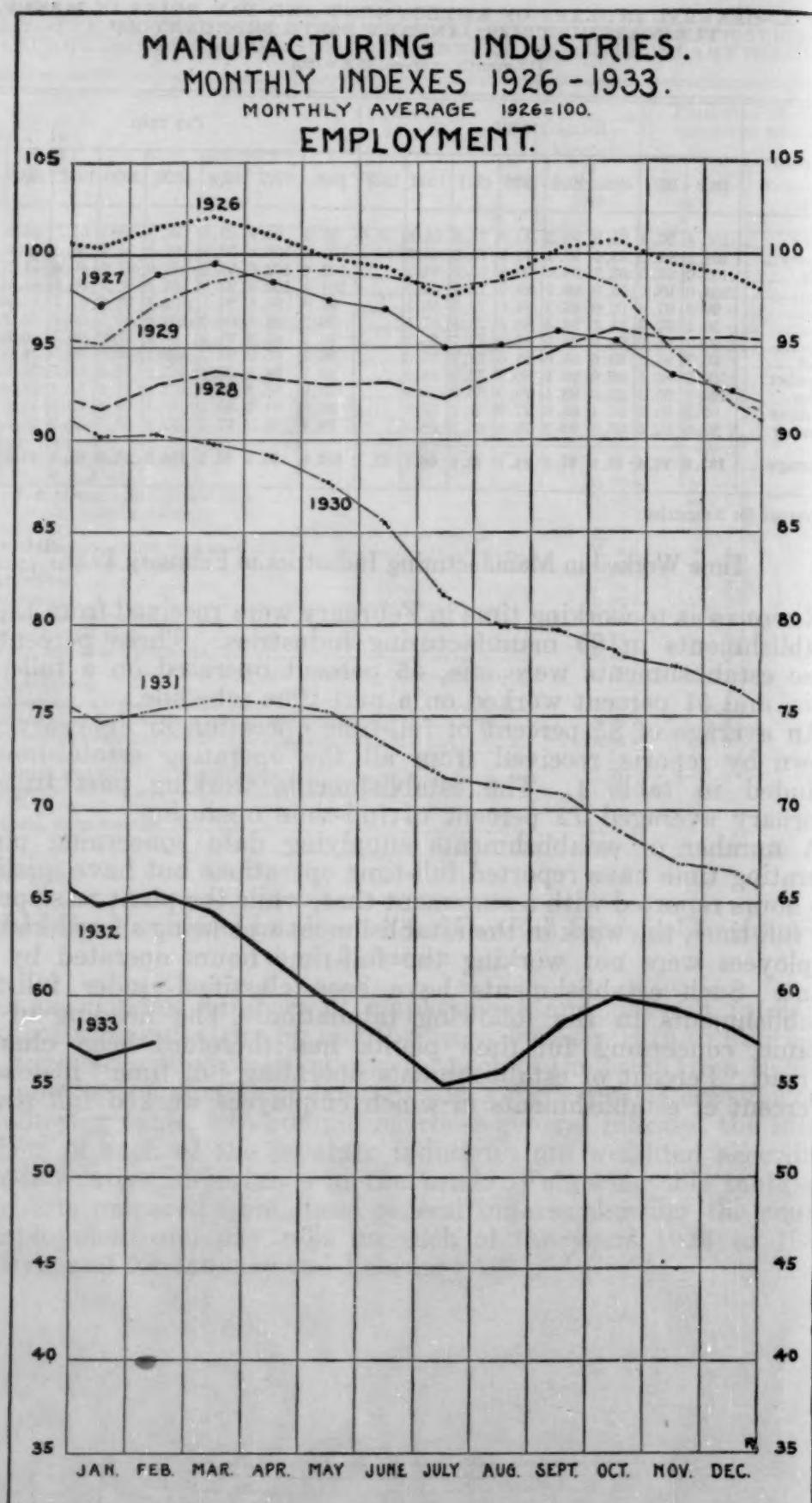
¹ Average for 2 months.

Time Worked in Manufacturing Industries in February 1933

REPORTS as to working time in February were received from 13,111 establishments in 89 manufacturing industries. Three percent of these establishments were idle, 45 percent operated on a full-time basis, and 51 percent worked on a part-time schedule.

An average of 85 percent of full-time operation in February was shown by reports received from all the operating establishments included in table 4. The establishments working part time in February averaged 72 percent of full-time operation.

A number of establishments supplying data concerning plant-operating time have reported full-time operations but have qualified the hours reported with a statement that, while the plant was operating full time, the work in the establishment was being shared and the employees were not working the full-time hours operated by the plant. Such establishments have been classified under full-time establishments in the following tabulation. The heading of the column concerning full-time plants has therefore been changed to read "Percent of establishments operating full time" instead of "Percent of establishments in which employees worked full time."



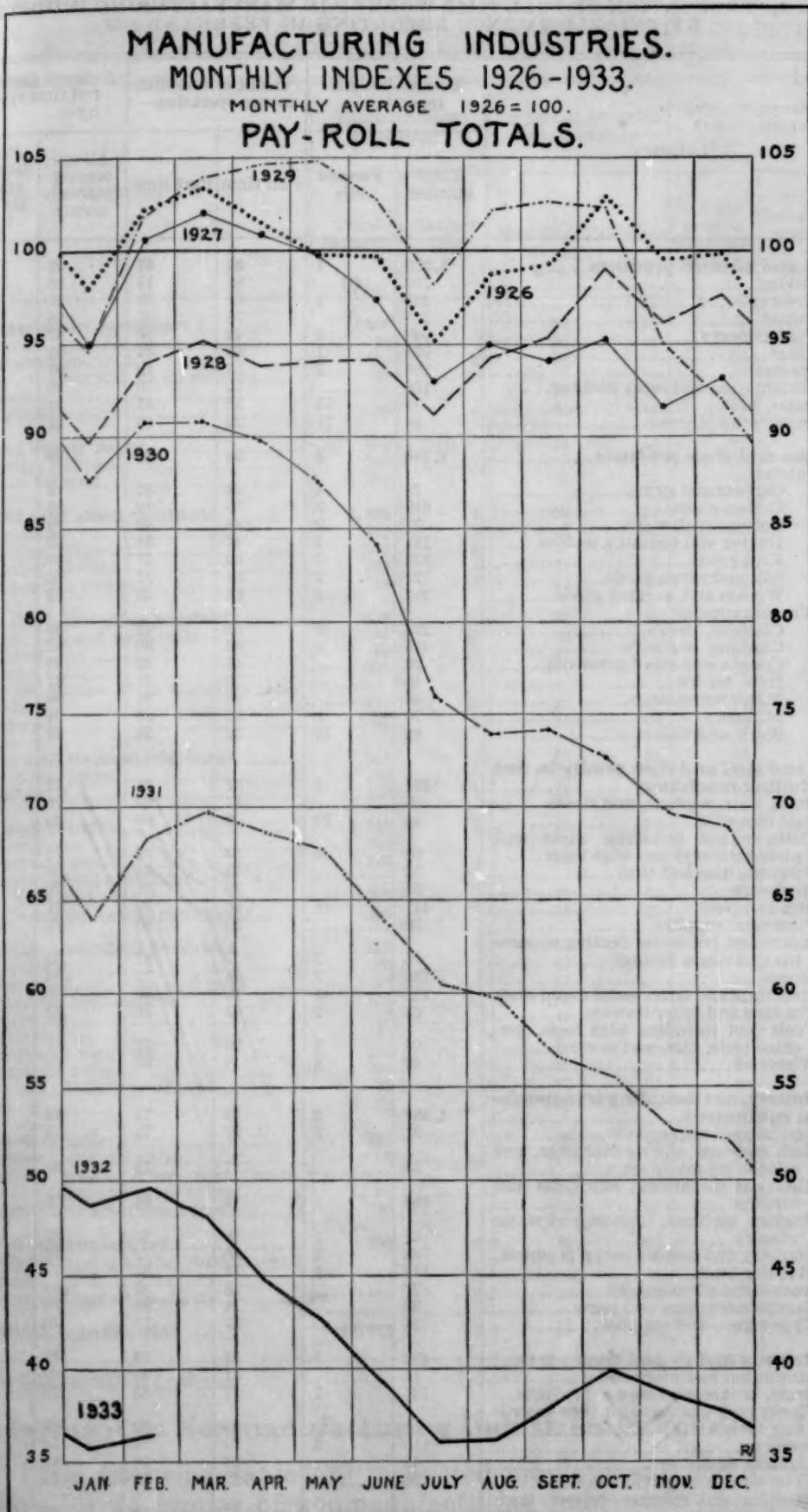


TABLE 4.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN FEBRUARY 1933

Industry	Establishments reporting—		Percent of establish-ments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All oper-ating establish-ments	Estab-lishments oper-ating part time
Food and kindred products	2,366	1	67	32	93	78
Baking	729	(1)	81	19	96	80
Beverages	267	1	61	38	88	60
Butter	235	(1)	73	27	95	81
Confectionery	248	2	42	56	87	76
Flour	378	1	65	34	92	76
Ice cream	286	2	58	40	92	81
Slaughtering and meat packing	178		70	30	96	86
Sugar, beet	31	13	52	35	94	85
Sugar refining, cane	14	21	29	50	81	70
Textiles and their products	2,386	3	58	38	90	74
Fabrics:						
Carpets and rugs	27	4	44	52	70	61
Cotton goods	610	3	55	42	88	71
Cotton small wares	97	2	48	49	89	78
Dyeing and finishing textiles	131	2	47	51	89	79
Knit goods	375	3	60	37	89	71
Silk and rayon goods	222	9	64	27	92	74
Woolen and worsted goods	217	4	66	30	93	77
Wearing apparel:						
Clothing, men's	252	2	55	43	89	75
Clothing, women's	215	4	66	30	92	73
Corsets and allied garments	23		61	39	93	82
Hats, fur-felt	19		53	47	87	69
Men's furnishings	46		54	46	89	75
Millinery	70	1	66	33	94	81
Shirts and collars	82	10	52	38	91	80
Iron and steel and their products, not including machinery	971	5	21	74	72	64
Bolts, nuts, washers, and rivets	58		17	83	70	64
Cast-iron pipe	36	22	8	69	49	43
Cutlery (not including silver and plated cutlery) and edge tools	99	4	34	62	74	60
Forgings, iron and steel	32		13	88	66	61
Hardware	54		19	81	70	64
Iron and steel	117	11	26	63	71	59
Plumbers' supplies	50		20	80	71	64
Steam and hot-water heating apparatus and steam fittings	76	7	7	87	55	52
Stoves	125	7	18	75	74	68
Structural and ornamental metal work	132	5	18	77	80	75
Tin cans and other tinware	53	2	43	55	85	74
Tools (not including edge tools, machine tools, files, and saws)	99	3	20	77	75	68
Wirework	40	3	18	80	78	74
Machinery, not including transportation equipment	1,303	2	23	75	74	66
Agricultural implements	51	2	27	71	78	69
Cash registers, adding machines, and calculating machines	33		27	73	82	76
Electrical machinery, apparatus and supplies	189	1	15	84	75	70
Engines, turbines, tractors and water wheels	68	1	18	81	72	66
Foundry and machine-shop products	782	2	26	72	72	63
Machine tools	113	4	15	81	73	68
Radios and phonographs	27		48	52	89	79
Textile machinery and parts	28		14	86	76	72
Typewriters and supplies	11		27	73	76	65
Nonferrous metals and their parts	480	1	24	75	77	69
Aluminum manufactures	16		31	69	89	83
Brass, bronze, and copper products	145	1	17	82	73	67
Clocks and watches and time-recording devices	18		28	72	67	54
Jewelry	119	2	24	74	75	66
Lighting equipment	42		24	76	82	76
Silverware, and plated ware	50		22	78	75	68
Smelting and refining—copper, lead, and zinc	21		57	43	89	72
Stamped and enameled ware	69		28	72	83	77

¹ Less than one half of 1 percent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN FEBRUARY 1933—Continued

Industry	Establishments reporting—		Percent of establish- ments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All op- erating estab- lish- ments	Estab- lish- ments oper- ating part time
Transportation equipment	296	7	39	55	86	76
Aircraft	26	4	62	35	95	86
Automobiles	139	8	27	65	82	75
Cars, electric and steam railroad	30	10	20	70	74	66
Locomotives	11		73	27	90	63
Shipbuilding	90	6	52	42	92	82
Railroad repair shops	681	(1)	44	55	89	80
Electric railroad	300		72	28	95	83
Steam railroad	381	(1)	23	77	84	79
Lumber and allied products	1,000	3	29	67	77	66
Furniture	313	3	35	62	80	70
Lumber, millwork	285	3	25	73	75	66
Lumber, sawmills	383	4	28	68	74	64
Turpentine and rosin	19	5	42	53	92	85
Stone, clay, and glass products	653	27	35	38	83	68
Brick, tile, and terra cotta	185	48	12	39	72	63
Cement	69	32	62	6	99	83
Glass	131	9	72	19	95	75
Marble, granite, slate, and other products	171	26	21	53	79	71
Pottery	97	9	31	60	78	67
Leather and its manufactures	344	2	48	50	90	80
Boots and shoes	222	2	45	53	89	80
Leather	122	1	54	45	90	79
Paper and printing	1,549	1	48	52	88	77
Boxes, paper	239		29	71	82	75
Paper and pulp	290	3	29	68	79	70
Printing and publishing:						
Book and job	626		44	56	89	80
Newspapers and periodicals	394		78	22	97	88
Chemicals and allied products	750	1	52	47	90	78
Chemicals	73	1	67	32	94	81
Cottonseed, oil, cake, and meal	33	9	67	24	94	74
Druggists' preparations	25		56	44	92	82
Explosives	17		12	88	78	75
Fertilizers	159		65	35	92	77
Paints and varnishes	289	(1)	37	63	85	76
Petroleum refining	78	4	67	29	96	88
Rayon and allied products	13		77	23	96	83
Soap	72		51	49	92	84
Rubber products	121		26	74	82	76
Rubber boots and shoes	8		25	75	90	87
Rubber goods, other than boots, shoes, tires, and inner tubes	83		31	69	85	77
Rubber tires and inner tubes	30		13	87	74	70
Tobacco manufactures	293	9	27	65	79	70
Chewing and smoking tobacco and snuff	31	6	52	42	84	63
Cigars and cigarettes	172	9	22	69	78	71
Total, 89 industries	13,111	3	45	51	85	72

¹ Less than one half of 1 percent.

Employment in Nonmanufacturing Industries in February 1933

IN THE following table are presented employment and pay-roll data for 15 groups of nonmanufacturing industries. Data concerning the building-construction industry is not included in the following tabulation, but is shown in more detail under the section "Building construction."

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN NONMANUFACTURING ESTABLISHMENTS IN FEBRUARY 1933 WITH JANUARY 1933 AND FEBRUARY 1932

Industrial group	Establishments reporting in both Jan. and Feb. 1933	Employment		Pay-roll totals		Index numbers, Feb. 1933 (average 1929=100)			
		Number on pay roll, Feb. 1933	Percent of change		Amount of pay roll (1 week), Feb. 1933	Percent of change			
			Jan. to Feb. 1933	Feb. 1932 to Feb. 1933		Jan. to Feb. 1933	Feb. 1932 to Feb. 1933		
Anthracite mining	160	80,390	+11.9	-17.6	\$2,259,501	+31.4	-0.9	58.7	56.8
Bituminous-coal mining	1,283	179,810	-7	-10.5	2,528,610	+2.9	-20.9	69.3	37.2
Metalliferous mining	267	21,229	-2.8	-32.8	389,992	-1.5	-36.0	31.5	17.8
Quarrying and nonmetallic mining	605	16,138	-7	-26.6	219,668	-4.0	-41.2	34.8	17.4
Crude petroleum producing	255	23,858	-2	+4.8	678,306	+4.5	-11.1	57.0	41.7
Telephone and telegraph	8,325	282,201	-1.0	-9.9	7,383,773	+4	-19.6	73.9	72.0
Power and light	3,342	204,929	-4	-11.2	5,952,600	-1.9	-16.7	77.4	71.6
Electric-railroad and motor-bus operation and maintenance	548	133,915	-2	-10.8	3,656,894	-5	-19.0	70.4	60.6
Wholesale trade	2,779	73,580	-1.5	-8.4	1,911,091	-5.0	-19.2	74.1	58.6
Retail trade	14,863	316,377	-4.5	-8.8	6,154,310	-6.9	-20.8	73.4	58.4
Hotels	2,544	131,683	(1)	-12.5	1,756,153	+3	-24.4	73.8	55.9
Canning and preserving	843	32,262	+2.8	-5.4	393,060	+4.6	-20.8	35.1	25.9
Laundries	926	53,318	-1.4	-10.3	782,596	-4.2	-24.3	74.4	55.5
Dyeing and cleaning	318	9,045	-2.8	-11.9	138,843	-9.1	-31.8	70.9	42.4
Banks, brokerage, insurance, and real estate	3,273	125,979	-2	(2)	4,411,930	-7	(2)	-----	-----

¹ Less than one tenth of 1 percent.² Not available.

Per capita weekly earnings in February 1933 for 15 nonmanufacturing industries included in the Bureau's monthly trend-of-employment survey, together with the percents of change in February 1933 as compared with January 1933 and February 1932 are given in the table following. These per capita weekly earnings must not be confused with full-time weekly rates of wages; they are per capita weekly earnings computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN 15 NONMANUFACTURING INDUSTRIES IN FEBRUARY 1933 AND COMPARISON WITH JANUARY 1933 AND FEBRUARY 1932

Industrial group	Per capita weekly earnings in February 1933	Percent of change February 1933 compared with—	
		January 1933	February 1932
Coal mining:			
Anthracite	\$28.11	+17.4	+20.2
Bituminous	14.06	+3.5	-11.5
Metallic mining	18.37	+1.3	-4.7
Quarrying and nonmetallic mining	13.61	-3.4	-19.9
Crude petroleum producing	28.43	+4.7	-15.1
Public utilities:			
Telephone and telegraph	26.16	+1.4	-10.9
Power and light	29.05	-1.5	-6.2
Electric-railroad and motor-bus operation and maintenance	27.31	-3	-9.2
Trade:			
Wholesale	25.97	-3.5	-11.7
Retail	19.45	-2.5	-13.1
Hotels (cash payments only) ¹	13.34	+4	-13.7
Canning and preserving	12.18	+1.7	-16.2
Laundries	14.68	-2.8	-15.6
Dyeing and cleaning	15.35	-6.5	-22.6
Banks, brokerage, insurance, and real estate	35.02	-5	(2)

¹ The additional value of board, room, and tips cannot be computed.² Not available.

Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals for 14 nonmanufacturing industries are presented in the following table. The index numbers show the variation in employment and pay rolls in these groups, by months, from January 1929 to February 1933 with the exception of laundries and the dyeing and cleaning groups, for which information over the entire period is not available. The Bureau recently secured data concerning employment and pay rolls for the index base year 1929 from establishments in the laundries and the dyeing and cleaning groups, and has computed index numbers for these two groups, which now appear in this tabulation. The monthly collection of trend-of-employment statistics in these two groups did not begin until the later months of 1930, and, therefore, indexes for each month of the entire period are not available.

TABLE 2.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR NONMANUFACTURING INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY AND FEBRUARY 1933

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous-coal mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January	102.1	90.6	76.2	52.5	105.8	89.3	61.5	43.2	102.5	93.9	80.8	60.8	101.4	73.3	47.0	36.1
February	106.9	89.5	71.2	58.7	121.5	101.9	57.3	56.8	102.4	91.5	77.4	69.3	102.1	68.3	47.0	37.2
March	82.6	82.0	73.7	73.7	78.5	71.3	61.2	-----	98.6	88.8	75.2	-----	86.4	65.2	46.8	-----
April	84.1	85.2	70.1	-----	75.0	75.2	72.0	-----	94.4	85.9	65.5	-----	81.7	58.6	33.9	-----
May	93.8	80.3	66.9	-----	98.8	76.1	58.0	-----	90.4	82.4	62.6	-----	77.5	54.4	30.7	-----
June	90.8	76.1	53.0	-----	94.3	66.7	37.4	-----	88.4	78.4	60.5	-----	75.6	52.4	27.3	-----
July	91.6	65.1	44.5	-----	84.0	53.7	34.5	-----	88.0	76.4	58.6	-----	68.9	50.4	24.4	-----
August	80.2	67.3	49.2	-----	78.8	56.4	41.4	-----	89.2	77.0	59.4	-----	71.1	50.6	26.4	-----
September	93.8	80.0	55.8	-----	91.6	84.9	47.0	-----	90.5	80.4	62.4	-----	74.9	53.6	30.2	-----
October	99.0	86.8	63.9	-----	117.2	91.1	66.7	-----	91.8	81.3	67.0	-----	79.4	56.2	37.8	-----
November	97.2	83.5	62.7	-----	98.0	79.5	51.0	-----	92.5	81.1	69.4	-----	79.1	54.6	38.0	-----
December	99.1	79.8	62.3	-----	100.0	78.4	56.2	-----	92.5	81.2	70.0	-----	77.7	52.3	37.7	-----
Average	93.4	80.5	62.5	155.6	95.3	75.4	53.7	149.9	93.4	83.2	67.4	100.6	81.3	57.5	35.6	136.7
Metalliferous mining																
January	95.7	68.3	49.3	32.4	92.7	55.0	29.7	18.1	79.6	64.4	48.9	35.1	71.9	50.4	30.2	18.1
February	92.3	65.3	46.9	31.5	92.5	54.6	27.8	17.8	79.8	66.6	47.4	34.8	73.5	54.4	29.6	17.4
March	90.9	63.5	45.0	-----	90.8	52.8	26.5	-----	83.0	70.0	46.0	-----	80.0	58.2	28.7	-----
April	89.3	63.9	43.3	-----	88.3	51.4	25.0	-----	87.4	76.1	48.6	-----	85.4	62.6	30.0	-----
May	87.5	62.4	38.3	-----	85.6	49.3	23.8	-----	90.8	75.0	50.6	-----	90.2	62.3	32.3	-----
June	84.6	60.0	32.2	-----	81.6	46.1	20.1	-----	90.3	72.3	49.5	-----	90.9	60.1	30.0	-----
July	80.5	56.2	29.5	-----	71.9	41.3	16.9	-----	89.9	71.0	49.5	-----	85.5	57.3	29.1	-----
August	79.0	55.8	28.6	-----	71.0	40.2	16.5	-----	89.3	68.9	51.1	-----	85.8	55.1	29.7	-----
September	78.1	55.5	29.3	-----	69.9	40.4	17.0	-----	87.7	66.6	52.4	-----	82.5	51.2	30.5	-----
October	77.2	53.8	30.5	-----	68.6	37.4	18.0	-----	84.7	64.5	52.4	-----	79.3	48.7	30.1	-----
November	72.8	52.8	31.9	-----	63.4	35.1	18.7	-----	78.3	59.3	49.4	-----	66.8	43.3	27.1	-----
December	70.1	51.2	33.3	-----	59.9	34.3	18.7	-----	70.2	53.9	42.3	-----	59.9	36.9	22.1	-----
Average	83.2	59.1	36.5	132.0	78.0	44.8	21.6	18.0	84.3	67.4	49.0	135.0	79.3	53.4	29.1	117.8
Crude petroleum producing																
January	92.7	74.8	54.9	57.2	94.0	71.5	46.5	39.9	101.6	90.5	83.0	74.6	105.1	96.3	89.1	71.7
February	90.8	73.2	54.4	57.0	88.6	70.0	46.9	41.7	100.2	89.2	82.0	73.9	101.9	94.8	89.6	72.0
March	89.3	72.2	51.4	-----	91.3	73.2	43.2	-----	99.4	88.6	81.7	-----	105.8	97.9	88.2	-----
April	86.8	69.8	54.9	-----	86.6	66.3	44.5	-----	98.9	88.1	81.2	-----	103.4	95.0	83.4	-----
May	89.8	67.8	54.5	-----	85.4	64.7	47.1	-----	99.7	87.4	80.6	-----	103.2	94.1	82.8	-----
June	90.2	65.0	54.2	-----	87.1	62.7	44.8	-----	99.8	86.9	79.9	-----	103.4	95.0	82.1	-----
July	89.9	65.3	55.4	-----	88.5	59.2	44.6	-----	100.0	86.6	79.1	-----	106.6	93.3	79.6	-----
August	87.7	62.4	57.4	-----	86.0	56.3	42.9	-----	98.8	85.9	78.1	-----	102.5	92.3	79.1	-----
September	85.0	61.2	56.2	-----	84.0	55.2	41.9	-----	96.8	85.0	77.4	-----	102.2	92.1	75.9	-----
October	85.2	60.4	56.8	-----	82.6	54.4	42.5	-----	94.5	84.1	76.2	-----	100.9	91.6	75.7	-----
November	83.6	57.6	56.5	-----	80.0	52.0	42.4	-----	93.0	83.5	75.5	-----	97.9	89.7	74.3	-----
December	77.4	58.2	57.2	-----	77.2	54.9	41.7	-----	91.6	83.1	74.8	-----	101.3	92.7	73.5	-----
Average	87.4	65.7	55.3	157.1	85.9	61.7	44.1	40.8	97.9	86.6	79.1	74.3	102.9	93.7	81.1	71.0

¹Average for 2 months.

TABLE 2.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR NONMANUFACTURING INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY AND FEBRUARY 1933—Continued

[12-month average, 1929=100]

Month	Power and light								Electric-railroad and motor-bus operation and maintenance ²							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January	99.6	99.2	89.3	77.7	99.7	98.6	88.4	73.0	97.1	86.9	79.5	70.6	97.8	85.6	75.4	60.9
February	98.8	97.8	87.2	77.4	100.4	99.7	86.0	71.6	95.1	86.6	78.9	70.4	95.7	87.1	74.8	60.6
March	99.7	96.7	85.5	—	102.1	102.4	85.4	—	94.4	86.4	77.6	—	95.4	88.1	73.6	—
April	100.7	97.1	84.8	—	102.6	97.6	82.4	—	95.2	86.8	78.0	—	97.1	86.6	71.8	—
May	103.4	97.6	84.0	—	104.5	98.7	84.2	—	95.2	85.9	76.9	—	96.0	85.1	72.2	—
June	104.6	97.2	83.2	—	107.8	98.3	80.5	—	94.8	85.3	76.5	—	97.0	84.8	70.2	—
July	105.9	96.7	82.3	—	106.7	97.4	78.7	—	95.3	85.6	75.6	—	95.6	83.3	66.4	—
August	106.4	95.9	81.5	—	106.6	96.2	76.7	—	92.9	84.8	74.1	—	92.1	81.9	63.8	—
September	105.2	94.7	81.0	—	106.1	94.3	74.7	—	91.8	84.0	73.5	—	90.5	81.2	62.5	—
October	104.8	92.7	79.9	—	105.6	93.2	74.4	—	91.0	82.7	72.3	—	88.9	79.0	61.5	—
November	103.4	91.3	79.1	—	103.7	93.3	73.2	—	89.3	81.5	71.8	—	87.7	79.7	61.7	—
December	103.2	90.3	78.4	—	106.3	91.2	73.2	—	88.8	79.9	71.4	—	88.6	77.8	61.9	—
Average	103.0	95.6	83.0	77.6	104.3	96.7	79.8	72.3	93.4	84.7	75.5	70.5	93.5	83.4	68.0	60.8
Wholesale trade																
January	100.0	89.5	81.8	75.3	100.0	87.5	74.1	61.7	98.9	90.0	84.3	76.9	99.7	89.4	78.0	62.7
February	98.5	88.2	80.9	74.1	98.3	88.4	72.5	58.6	94.4	87.1	80.5	73.4	96.0	86.7	73.7	58.4
March	97.7	87.4	79.8	—	99.7	89.1	71.3	—	93.9	87.8	81.4	—	95.5	87.5	73.4	—
April	97.3	87.4	78.9	—	97.9	85.2	68.9	—	97.3	90.1	81.6	—	97.5	88.3	72.7	—
May	96.8	87.1	77.9	—	97.4	84.7	69.7	—	96.7	89.9	80.9	—	97.3	88.0	71.1	—
June	96.5	87.1	77.0	—	98.6	84.1	66.2	—	93.9	89.1	79.4	—	96.8	87.6	68.2	—
July	96.0	86.8	76.6	—	96.0	83.3	64.7	—	89.0	83.9	74.6	—	91.7	83.3	63.3	—
August	95.0	86.5	76.4	—	93.6	82.1	63.2	—	85.6	81.8	72.6	—	87.6	80.3	60.7	—
September	94.8	86.1	77.1	—	93.6	81.4	63.1	—	92.0	86.6	77.8	—	92.4	83.5	64.6	—
October	94.2	85.2	77.8	—	92.9	79.9	63.9	—	95.5	80.8	81.3	—	95.1	84.6	67.1	—
November	92.6	84.1	77.6	—	91.0	79.7	63.3	—	98.4	90.9	81.7	—	96.8	85.4	66.9	—
December	92.0	83.7	77.0	—	91.3	77.8	62.6	—	115.1	106.2	95.2	—	107.7	94.1	73.6	—
Average	96.0	86.6	78.2	74.7	95.9	83.6	67.0	60.2	95.9	89.4	80.9	75.2	96.2	86.6	69.4	60.6
Hotels																
January	100.4	95.0	83.2	73.8	100.3	91.0	73.9	55.7	46.1	48.9	35.0	34.1	50.3	46.1	31.8	24.8
February	102.4	96.8	84.3	73.8	103.8	93.7	73.9	55.9	45.7	48.3	37.1	35.1	51.5	48.6	32.7	25.9
March	102.4	96.8	84.0	—	104.4	93.4	72.4	—	49.7	53.0	36.3	—	50.8	50.3	31.9	—
April	100.1	95.9	82.7	—	100.3	89.9	69.6	—	74.8	59.6	47.0	—	72.6	57.1	37.9	—
May	98.0	92.5	80.1	—	98.4	87.7	67.0	—	65.7	56.0	40.5	—	66.9	56.0	36.0	—
June	98.0	91.6	78.0	—	98.1	85.4	63.8	—	83.0	70.6	55.5	—	81.5	58.6	40.5	—
July	101.3	93.3	78.4	—	99.8	85.2	61.8	—	126.3	102.2	73.0	—	112.7	74.2	47.5	—
August	101.5	92.8	77.6	—	98.6	83.8	59.6	—	185.7	142.9	99.0	—	172.0	104.7	65.6	—
September	100.1	90.6	77.0	—	97.1	81.9	59.1	—	246.6	180.1	125.3	—	214.8	129.4	75.1	—
October	97.5	87.4	75.4	—	95.5	79.7	58.6	—	164.7	108.1	81.1	—	140.0	77.6	51.8	—
November	95.2	84.9	74.3	—	93.6	77.1	57.5	—	96.7	60.8	50.5	—	82.9	48.1	34.4	—
December	93.5	83.1	73.2	—	91.5	75.4	56.6	—	61.6	40.7	33.7	—	57.4	36.9	25.6	—
Average	99.2	91.7	79.0	73.8	98.5	85.4	64.5	55.8	103.9	80.9	59.5	34.6	96.1	65.6	42.6	25.4
Laundries																
January	90.5	84.7	75.4	—	86.6	76.4	57.9	—	88.9	82.1	73.0	—	77.7	65.8	46.6	—
February	90.0	82.9	74.4	—	85.6	73.3	55.5	—	87.4	80.5	70.9	—	75.1	62.2	42.4	—
March	89.5	82.0	—	—	85.6	71.6	—	—	88.0	80.6	—	—	75.6	61.7	—	—
April	90.5	82.0	—	—	86.8	71.4	—	—	95.7	83.3	—	—	86.3	65.9	—	—
May	90.3	81.4	—	—	86.5	70.6	—	—	96.7	84.5	—	—	86.6	67.3	—	—
June	91.0	81.0	—	—	87.1	68.6	—	—	99.0	85.1	—	—	89.1	65.8	—	—
July	91.8	80.3	—	—	87.4	66.3	—	—	98.6	82.4	—	—	86.2	60.0	—	—
August	90.2	78.9	—	—	84.6	63.9	—	—	93.5	79.5	—	—	80.0	56.3	—	—
September	89.3	78.6	—	—	84.1	62.9	—	—	95.3	83.3	—	—	82.6	61.0	—	—
October	88.1	77.5	—	—	81.8	61.2	—	—	94.2	82.3	—	—	81.4	58.8	—	—
November	86.2	76.2	—	—	78.9	59.1	—	—	90.1	78.0	—	—	74.7	52.3	—	—
December	85.3	75.9	—	—	77.4	58.7	—	—	84.9	75.2	—	—	67.9	48.4	—	—
Average	89.4	80.1	74.9	—	84.4	67.0	56.7	—	92.7	81.4	72.0	—	30.3	60.5	44.5	—
Dyeing and cleaning																
January	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
August	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
September	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
October	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
November	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
December	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

¹ Average for 2 months.² Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

Average Man-Hours Worked and Average Hourly Earnings

IN THE following tables the Bureau presents a tabulation of man-hours worked per week and average hourly earnings, based on reports supplied by identical establishments in January and February 1933 in 15 industrial groups and 72 manufacturing industries. Man-hour data for the building construction group and for the insurance, real estate, banking, and brokerage groups are not available, and data for several of the 89 manufacturing industries surveyed monthly are omitted from these tables due to lack of adequate information.

The total number of establishments supplying man-hour data in these 15 industrial groups represents approximately 50 percent of the establishments supplying monthly employment data.

The tabulations are based on reports supplying actual man-hours worked and do not include nominal man-hour totals, obtained by multiplying the total number of employees in the establishment by the plant operating time.

Table 1 shows the average hours worked per employee per week and average hourly earnings in 15 industrial groups and for all groups combined. The average hours per week and average hourly earnings for the combined total of the 15 industrial groups are weighted averages, wherein the average man-hours and average hourly earnings in each industrial group are multiplied by the total number of employees in the group in the current month and the sum of these products divided by the total number of employees in the combined 15 industrial groups.

In presenting information for the separate manufacturing industries shown in table 2, data are published for only those industries in which the available man-hour information covers 20 percent or more of the total number of employees in the industry at the present time. The average man-hours and hourly earnings for the combined 89 manufacturing industries have been weighted in the same manner as the averages for all industrial groups combined, table 1.

Per capita weekly earnings, computed by multiplying the average man-hours worked per week by the average hourly earnings shown in the following table, are not identical to the per capita weekly earnings appearing elsewhere in this trend-of-employment compilation, which are obtained by dividing the total weekly earnings in all establishments reporting by the total number of employees in those establishments. As already noted, the basic information upon which the average weekly man-hours and average hourly earnings are computed covers approximately 50 percent of the establishments reporting monthly employment data.

TABLE 1.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN 15 INDUSTRIAL GROUPS, JANUARY AND FEBRUARY 1933

Industrial group	Average hours per week		Average hourly earnings	
	January 1933	February 1933	January 1933	February 1933
Manufacturing			Hours	Hours
Anthracite mining	37.4	38.1	42.7	42.4
Bituminous coal mining	28.1	35.0	83.6	81.5
Metalliferous mining	28.8	30.6	48.3	46.4
Quarrying and nonmetallic mining	38.7	38.8	47.3	46.9
Crude petroleum producing	35.3	34.5	39.5	39.9
Telephone and telegraph	45.0	46.3	57.7	62.0
Power and light	37.6	36.9	69.3	71.6
Electric-railroad and motor-bus operation and maintenance	46.6	46.4	63.3	62.0
Wholesale trade	45.5	45.5	59.5	59.2
Retail trade	46.8	46.5	56.5	54.4
Hotels	45.2	43.7	43.1	43.5
Canning and preserving	51.5	51.8	24.3	24.1
Laundries	39.8	39.3	36.0	35.2
Dyeing and cleaning	42.0	41.8	35.0	33.8
Total	44.1	43.2	37.6	36.2
	40.8	41.0	45.5	45.0

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS, IN SELECTED MANUFACTURING INDUSTRIES, JANUARY AND FEBRUARY 1933

Industry	Average hours per week		Average hourly earnings	
	January 1933	February 1933	January 1933	February 1933
Food and kindred products			Hours	Hours
Baking	46.7	46.9	43.3	42.5
Beverages	39.6	39.7	60.8	60.7
Confectionery	40.9	40.1	33.0	32.9
Flour	47.7	46.7	43.2	42.5
Ice cream	48.7	48.7	51.5	50.1
Slaughtering and meat packing	46.4	45.2	44.3	44.2
Sugar, beet	47.2	46.1	42.8	55.4
Sugar refining, cane	46.6	47.7	41.1	41.0
Textiles and their products				
Carpets and rugs	34.5	34.0	40.1	39.5
Cotton goods	45.2	45.3	22.1	21.9
Cotton small wares	39.9	42.4	34.3	34.4
Dyeing and finishing textiles	45.0	47.8	38.5	39.1
Knit goods	37.8	39.2	32.5	32.3
Silk and rayon goods	39.8	40.3	29.3	29.5
Woolen and worsted goods	44.9	46.7	34.4	34.7
Iron and steel and their products, not including machinery				
Bolts, nuts, washers, and rivets	20.3	31.8	45.7	44.5
Cast-iron pipe	25.5	27.0	48.0	44.9
Cutlery (not including silver and plated cutlery) and edge tools	34.3	36.5	48.9	49.0
Forgings, iron and steel	30.3	30.1	48.2	49.3
Hardware	28.1	29.8	44.9	43.3
Iron and steel	25.7	26.9	48.4	48.5
Plumbers' supplies	27.3	31.1	45.6	43.9
Steam and hot-water heating apparatus and steam fittings	29.1	29.1	50.1	49.9
Stoves	28.4	31.2	47.8	45.8
Structural and ornamental metal work	29.1	29.7	45.3	42.9
Tools (not including edge tools, machine tools, files, and saws)	31.0	29.4	47.7	45.9
Machinery, not including transportation equipment				
Agricultural implements	30.5	33.3	49.1	47.4
Cash registers, adding machines, and calculating machines	33.7	33.0	67.4	68.0
Electrical machinery, apparatus, and supplies	29.5	30.3	59.5	57.3
Engines, turbines, tractors, and water wheels	32.0	32.8	57.1	55.4
Foundry and machine-shop products	28.2	29.6	51.5	51.2
Machine tools	32.3	32.4	56.5	55.8
Radios and phonographs	32.5	39.9	42.8	38.7
Textile machinery and parts	29.6	28.3	57.4	57.2
Typewriters and supplies	32.1	33.1	47.1	45.8

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED MANUFACTURING INDUSTRIES, JANUARY AND FEBRUARY 1933—Continued

Industry	Average hours per week		Average hourly earnings	
	January 1933	February 1933	January 1933	February 1933
Nonferrous metals and their parts:				
Brass, bronze, and copper products	29.8	30.0	46.7	46.5
Clocks and watches and time-recording devices	31.9	26.9	47.0	48.9
Jewelry	33.1	34.2	48.5	47.6
Silverware and plated ware	32.7	33.3	46.5	44.6
Smelting and refining—copper, lead, and zinc	31.1	31.6	47.9	48.6
Stamped and enameled ware	35.8	37.0	38.4	38.4
Transportation equipment:				
Aircraft	42.6	44.3	65.7	64.3
Automobiles	35.7	31.2	55.6	56.7
Locomotives	24.9	27.7	52.9	53.1
Shipbuilding	29.7	29.5	59.8	61.2
Railroad repair shops:				
Electric railroad	43.8	43.9	57.6	56.9
Steam railroad	34.5	35.8	63.0	62.4
Lumber and allied products:				
Furniture	31.5	34.3	34.9	33.2
Lumber:				
Millwork	35.5	35.8	34.3	32.8
Sawmills	32.4	33.4	30.6	29.1
Stone, clay, and glass products:				
Brick, tile, and terra cotta	29.0	27.5	36.3	36.6
Cement	30.7	32.5	44.4	42.6
Glass	34.7	34.4	43.8	44.9
Marble, granite, slate, and other products	32.2	28.5	54.9	59.1
Pottery	36.0	38.0	40.0	40.1
Leather and its manufactures: Leather	42.6	43.3	39.2	39.3
Paper and printing:				
Boxes, paper	37.3	39.9	42.7	41.5
Paper and pulp	38.9	40.2	42.8	42.4
Printing and publishing:				
Book and job	37.1	37.0	66.2	65.8
Newspapers and periodicals	40.9	40.6	75.9	74.7
Chemicals and allied products:				
Chemicals	40.2	41.9	52.0	51.7
Druggists' preparations	43.8	42.3	42.4	45.1
Explosives	35.3	36.0	54.3	54.1
Fertilizers	43.1	41.2	28.4	25.7
Paints and varnishes	38.0	40.2	52.5	51.1
Petroleum refining	39.7	38.3	63.0	62.8
Rayon and allied products	45.5	44.3	37.7	38.2
Soap	40.2	42.3	43.6	43.6
Rubber products:				
Rubber goods, other than boots, shoes, tires, and inner tubes	36.7	39.5	43.6	42.0
Rubber tires and inner tubes	28.9	28.6	58.5	58.1
Tobacco manufactures:				
Chewing and smoking tobacco and snuff	43.0	39.7	31.8	31.6
Cigars and cigarettes	35.2	36.2	29.9	29.8

Employment in Building Construction in February 1933

EMPLOYMENT in the building construction industry decreased 9.1 percent in February as compared with January and pay rolls decreased 16.5 percent over the month interval.

The percents of change of employment and pay-roll totals in February as compared with January are based on returns made by 9,775 firms employing in February 57,665 workers in the various trades in the building construction industry. These reports cover building operations in various localities in 34 States and the District of Columbia.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, JANUARY AND FEBRUARY 1933

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Jan. 15	Feb. 15		Jan. 15	Feb. 15	
Alabama: Birmingham	67	439	340	-22.6	\$4,925	\$3,691	-25.1
California:							
Los Angeles ¹	17	524	458	-12.6	10,921	10,135	-7.2
San Francisco-Oakland ¹	24	643	796	+23.8	12,463	17,207	+38.1
Other reporting localities ¹	17	202	333	+14.0	5,935	6,848	+15.4
Colorado: Denver	170	563	558	-0.9	12,205	11,079	-9.2
Connecticut:							
Bridgeport	122	392	352	-10.2	8,297	7,045	-15.1
Hartford	197	745	684	-8.2	16,868	14,357	-14.9
New Haven	165	1,019	874	-14.2	26,917	21,485	-20.2
Delaware: Wilmington	116	951	849	-10.7	19,000	14,896	-21.6
District of Columbia	522	7,776	7,386	-5.0	211,308	175,582	-16.9
Florida:							
Jacksonville	46	290	406	+40.0	4,341	4,944	+13.9
Miami	73	504	489	-3.0	10,431	9,083	-12.9
Georgia: Atlanta	128	930	968	+3.9	14,501	12,700	-12.4
Illinois:							
Chicago ¹	131	1,079	1,035	-4.1	27,789	24,440	-12.1
Other reporting localities ¹	77	388	302	-22.2	7,235	5,067	-30.0
Indiana:							
Evansville	50	220	208	-5.5	3,754	3,650	-2.8
Fort Wayne	92	235	275	+17.0	3,656	4,388	+20.0
Indianapolis	154	700	629	-17.2	14,531	12,016	-17.3
South Bend	39	219	222	+1.4	3,685	4,477	+21.5
Iowa: Des Moines	103	583	464	-20.4	13,473	8,837	-34.4
Kansas: Wichita	57	354	307	-13.3	6,501	5,330	-18.0
Kentucky: Louisville	118	628	502	-20.1	10,128	7,212	-28.8
Louisiana: New Orleans	124	1,244	1,311	+5.4	19,379	20,794	+7.3
Maine: Portland	95	303	284	-6.3	6,006	5,474	-8.9
Maryland: Baltimore ¹	114	868	701	-19.2	14,422	11,070	-23.2
Massachusetts: All reporting localities ¹	725	3,510	3,160	-10.0	85,668	74,107	-13.5
Michigan:							
Detroit	378	1,979	1,747	-11.7	38,628	33,139	-14.2
Flint	46	112	144	+28.6	1,653	1,936	+17.1
Grand Rapids	95	378	289	-23.5	7,217	4,458	-38.2
Minnesota:							
Duluth	55	301	292	-3.0	6,579	6,198	-5.8
Minneapolis	215	800	868	+2.5	17,239	17,298	+3.0
St. Paul	146	427	360	-15.7	7,488	6,292	-16.0
Missouri:							
Kansas City ²	234	1,081	930	-14.0	22,132	20,847	-5.8
St. Louis	436	2,214	1,755	-20.7	58,649	40,708	-30.6
Nebraska: Omaha	128	520	528	+1.5	8,016	8,817	+10.0
New York:							
New York City ¹	303	6,746	5,670	-16.0	241,847	181,059	-25.1
Other reporting localities ¹	106	2,907	2,981	-0.5	80,014	67,847	-15.2
North Carolina: Charlotte	38	191	192	+0.5	2,582	2,438	-5.6
Ohio:							
Akron	75	253	191	-24.5	3,496	2,899	-17.1
Cincinnati ³	465	2,521	2,224	-11.8	61,216	48,766	-20.3
Cleveland	476	1,999	1,736	-13.2	48,714	41,340	-15.1
Dayton	108	436	376	-13.8	7,744	6,134	-20.8
Youngstown	60	183	222	+21.3	3,082	3,627	+17.7
Oklahoma:							
Oklahoma City	73	285	282	-1.1	4,207	4,872	+13.4
Tulsa	49	223	224	+0.4	3,322	3,538	+6.5
Oregon: Portland	175	560	507	-10.9	11,041	9,135	-17.3
Pennsylvania: ⁴							
Erie area ¹	15	50	87	+74.0	1,006	1,210	+20.3
Philadelphia area ¹	393	2,532	2,418	-4.5	50,069	38,803	-22.5
Pittsburgh area ¹	224	1,153	1,051	-8.8	30,873	28,176	-8.7
Reading-Lebanon area ¹	42	189	156	-17.5	3,462	1,975	-43.0
Scranton area ¹	36	194	187	-3.6	3,949	4,145	+5.0
Other reporting areas ¹	247	1,590	1,438	-9.6	20,018	25,705	-11.4
Rhode Island: Providence	223	1,048	836	-20.2	22,027	16,627	-25.0
Tennessee:							
Chattanooga	36	330	220	-33.3	3,708	2,638	-30.0
Knoxville	48	360	261	-27.5	4,118	2,588	-37.2
Memphis	85	375	366	-2.4	6,830	6,171	-9.8
Nashville	64	524	451	-13.9	7,280	7,007	-3.7
Texas:							
Dallas	146	926	834	-9.9	14,007	13,845	-1.8
El Paso	24	238	247	+3.8	3,300	3,086	-6.5
Houston	142	647	495	-23.5	10,029	7,325	-27.0
San Antonio	97	477	496	+4.0	7,244	7,314	+1.0

¹ Data supplied by cooperating State bureaus.² Includes both Kansas City, Mo., and Kansas City, Kans.³ Includes Covington and Newport, Ky.⁴ Each separate area includes from 2 to 8 counties.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, JANUARY AND FEBRUARY 1933—Con.

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Jan. 15	Feb. 15		Jan. 15	Feb. 15	
Utah: Salt Lake City	79	211	166	-21.3	\$3,524	\$2,561	-27.3
Virginia:							
Norfolk-Portsmouth	84	415	440	+6.0	5,968	6,119	+2.5
Richmond	135	752	664	-11.7	13,530	11,035	-18.4
Washington:							
Seattle	147	512	480	-6.2	9,399	9,661	+2.8
Spokane	48	155	109	-29.7	2,019	1,269	-37.1
Tacoma	74	107	122	+14.0	1,771	1,732	-2.2
West Virginia: Wheeling	44	125	93	-25.6	2,012	1,593	-20.8
Wisconsin: All reporting localities ¹	60	792	639	-19.3	14,754	11,024	-25.3
Total, all localities	9,775	63,466	57,665	-9.1	1,450,349	1,218,780	-16.5

¹ Data supplied by cooperating State bureaus.

Trend of Employment in February 1933 by States

IN THE following table are shown the fluctuations in employment and pay-roll totals in February 1933 as compared with January 1933 in certain industrial groups by States. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building-construction data, information concerning which is published elsewhere in a separate tabulation by city and State totals. In addition to the combined total of all groups, the trend of employment and pay rolls in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude-petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundries, and dyeing and cleaning groups are presented. In this State compilation, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group—public utilities. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly pay roll in January and February 1933 as reported by identical establishments in this industry are included, however, in the combined total of "All groups."

The percents of change shown in the accompanying table, unless otherwise noted, are unweighted percents of change; that is, the industries included in the groups, and the groups comprising the total of all groups, have not been weighted according to their relative importance in the combined totals.

As the anthracite-mining industry is confined entirely to the State of Pennsylvania, the changes reported in this industry in table 1, nonmanufacturing industries, are the fluctuations in this industry by State totals.

When the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial-group tabulation, but are included in the State totals for "All groups." Data are not presented for any industrial group when the representation in the State covers less than three establishments.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS IN JANUARY AND FEBRUARY 1933 BY STATES

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll, February 1933	Percent of change	Amount of pay roll (1 week), February 1933	Percent of change	Number of establishments	Number on pay roll, February 1933	Percent of change	Amount of pay roll (1 week), February 1933	Percent of change
Alabama	434	49,186	+2.3	\$522,294	+4.2	204	34,013	+2.8	\$337,245	+3.4
Arizona	379	7,884	+1.8	161,400	+1.8	50	1,598	+2.8	33,591	+4.5
Arkansas	¹ 1,411	14,211	-0.9	197,078	-0.9	180	9,121	-0.9	106,523	-2.4
California	¹ 1,940	223,753	-1.1	5,371,658	+0.6	1,108	109,587	+1.0	2,480,489	+2.9
Colorado	748	26,048	+1.3	524,992	+1.5	121	9,330	+4.4	168,212	+7.7
Connecticut	1,032	127,881	+1.4	2,210,486	+2.4	639	109,770	+1.0	1,744,035	+3.0
Delaware	125	8,870	-1.7	176,975	-0.9	52	6,717	-2.2	129,600	-1.9
District of Columbia	¹ 312	34,334	-1.1	726,443	-3.0	52	3,217	-2.7	94,898	-2.8
Florida	575	27,410	+0.9	395,398	+0.9	130	11,959	+15.3	159,954	+20.1
Georgia	622	69,112	-0.6	813,620	-1.0	299	56,962	-0.3	564,942	-3.3
Idaho	201	5,895	-20.6	102,033	-12.8	38	2,266	-35.2	32,165	-30.0
Illinois	¹ 1,571	265,222	+1.3	5,354,796	+1.9	1,039	160,451	+2.7	2,816,703	+4.0
Indiana	1,139	103,732	+0.5	1,837,601	-1.1	548	76,965	+0.7	1,310,629	-1.2
Iowa	1,144	39,658	+1.0	741,385	-0.8	440	21,265	+2.6	376,821	-0.2
Kansas	¹ 1,017	57,890	-1.7	1,250,676	-1.6	414	22,236	-0.9	432,246	-1.8
Kentucky	789	56,264	+1.5	816,624	+2.2	201	19,409	+5.3	287,841	+2.0
Louisiana	482	28,015	-1.2	405,474	-2.6	211	17,686	-1.5	226,457	-2.4
Maine	517	37,123	+3.7	597,138	+7.4	179	31,406	+4.2	473,464	+9.7
Maryland	¹ 800	70,462	+1.1	1,289,780	+0.4	430	46,894	+3.2	775,284	+2.2
Massachusetts	¹ 7,971	329,407	+2.5	6,650,903	+2.0	1,093	157,910	+3.8	2,656,931	+6.4
Michigan	1,379	244,759	-1.3	4,529,213	-8.5	337	176,465	+0.3	2,877,957	-18.7
Minnesota	974	54,972	-2.4	1,126,693	-3.3	268	27,058	-2.1	520,755	-2.1
Mississippi	361	7,780	-0.9	95,014	-2.1	63	4,329	+1.1	42,533	-0.7
Missouri	1,057	97,178	+0.3	1,930,952	+0.7	511	57,023	+1.7	1,020,687	+2.4
Montana	324	7,249	-14.4	174,137	-11.4	49	2,080	-30.7	41,098	-26.4
Nebraska	701	19,462	-1.1	419,134	-0.9	121	9,482	-1.6	202,798	+1.4
Nevada	136	1,191	+5.9	29,880	+5.5	20	205	+3.0	4,882	-1.6
New Hampshire	439	32,560	-0.1	516,077	+3.6	182	29,296	+1.1	436,883	+4.7
New Jersey	1,404	166,398	+0.7	3,525,886	+0.7	⁸ 689	163,745	+1.9	3,141,391	+2.6
New Mexico	169	4,030	-1.5	69,276	-2.1	25	406	-8.8	6,199	+3.5
New York	5,191	460,524	+1.1	10,355,156	-2.2	⁹ 1,663	295,688	+1.7	6,194,562	+1.7
North Carolina	862	104,240	-1.2	1,107,788	-1.1	529	99,836	-1.3	1,038,682	-1.4
North Dakota	311	3,167	-4.7	64,698	-7.9	61	930	-4.8	20,617	-7.8
Ohio	4,493	347,114	+2.7	6,226,111	+2.4	1,880	255,607	+4.0	4,416,333	+5.2
Oklahoma	677	24,345	-0.8	471,705	-2.6	117	8,096	-2.2	145,572	-6.3
Oregon	748	23,712	-1.0	435,086	-1.8	152	13,041	-0.9	201,195	-0.5
Pennsylvania	¹ 3,930	570,158	+1.9	10,380,429	+6.3	1,737	306,979	+1.3	4,303,404	+3.2
Rhode Island	863	51,901	-0.1	905,748	+1.0	267	41,723	+3.3	672,904	+2.0
South Carolina	300	48,797	-0.4	464,898	+2.2	168	45,420	-0.7	413,593	+1.1
South Dakota	228	5,076	-7.2	122,918	-2.1	47	1,881	-14.7	34,755	-15.1
Tennessee	818	55,538	-2.7	746,479	-3.2	258	40,755	-1.7	517,676	-0.9
Texas	777	48,458	-1.3	968,209	-0.9	558	30,241	-1.1	577,543	-0.7
Utah	315	12,696	-3.8	240,786	-0.9	74	4,260	-10.4	68,287	-22.5
Vermont	346	8,747	+7.6	155,194	+7.5	115	4,871	+11.4	79,370	+11.4
Virginia	1,242	77,298	-0.9	1,160,937	-2.7	429	54,894	-0.7	777,500	-2.6
Washington	1,107	41,975	-5.2	850,477	-3.7	255	19,888	-7.3	356,269	-5.0
West Virginia	786	83,124	+5.5	1,313,712	-0.8	179	29,576	+2.7	520,151	+1.3
Wisconsin	¹⁰ 1,082	117,295	+1.7	1,842,297	+3.0	798	91,004	+2.7	1,319,602	+5.5
Wyoming	194	5,988	-4.4	142,173	+4.9	30	1,294	-13.6	33,512	-3.8

¹ Includes automobile dealers and garages, and sand, gravel, and building construction.² Includes banks, insurance, and office employment.³ Includes building and contracting.⁴ Includes transportation, financial institutions, restaurants, and building construction.⁵ Weighted percent of change.⁶ Includes construction, municipal, agricultural, and office employment, amusement and recreation, professional and transportation services.⁷ Less than one tenth of 1 per cent.⁸ Includes laundries.⁹ Includes laundering and cleaning.¹⁰ Includes construction, but does not include hotels and restaurants.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JANUARY AND FEBRUARY 1933 BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations.]

State	Wholesale trade					Retail trade				
	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change
Alabama	15	526	-0.6	\$13,204	-4.4	27	1,913	+7.9	\$27,605	-0.9
Arizona	20	160	-.6	4,532	-5.8	186	1,427	-2.6	24,102	-3.4
Arkansas	15	388	-4.4	10,953	-5.7	152	1,512	+1.9	27,458	+.3
California	109	5,352	-.5	151,261	-2.5	112	22,623	-2.5	451,980	-6.1
Colorado	28	818	(11)	21,247	-8.7	273	3,393	-7.4	67,699	-12.6
Connecticut	57	1,214	-.4	33,732	-1.4	112	4,417	-10.1	88,407	-7.3
Delaware	10	176	+.6	4,781	-1.5	9	156	+4.7	2,159	-.5
District of Columbia	26	317	-.3	9,812	-3.2	401	9,685	-2.7	199,921	-4.5
Florida	50	812	(11)	18,716	-2.4	80	1,323	+8.9	24,952	+4.9
Georgia	32	396	-2.0	10,297	-3.5	28	1,800	-.1	28,686	-6.0
Idaho	7	108	(11)	2,898	-6.7	68	639	-26.8	10,821	-12.4
Illinois	16	937	+2.1	21,441	+1.5	96	19,857	-.8	390,130	-3.8
Indiana	53	1,016	-1.9	25,581	-5.4	164	5,232	-3.0	91,801	-4.6
Iowa	34	908	-.8	24,584	-9.9	115	2,816	-5.1	46,282	-12.6
Kansas	69	1,729	-.7	40,681	-3.0	309	5,565	-2.3	100,292	-3.4
Kentucky	15	276	+2.6	5,865	+.5	28	1,278	-8.8	18,413	-16.0
Louisiana	26	500	-2.3	12,834	-7.6	47	2,800	-1.5	41,298	-1.8
Maine	17	407	-8.1	9,735	-6.8	69	988	-.3	18,739	-.5
Maryland	33	717	-3.0	14,843	-6.6	35	4,844	-4.0	81,906	-4.5
Massachusetts	691	15,741	-1.0	357,709	-1.8	4,132	56,405	-1.8	1,110,474	-2.9
Michigan	59	1,527	-1.0	41,109	-4.8	136	9,058	-5.6	168,422	-8.0
Minnesota	59	4,313	-1.1	110,465	-4.7	277	6,660	-9.6	117,211	-8.8
Mississippi	5	120	+.8	2,157	-4.7	45	364	-1.9	3,540	-8.9
Missouri	57	4,963	-2.0	122,240	-6.2	103	5,106	-4.4	96,755	-8.6
Montana	11	213	+3.9	6,330	+.8	82	736	-4.3	15,387	-9.8
Nebraska	36	831	(11)	21,355	-5.9	180	1,632	-3.8	31,083	-4.7
Nevada	7	76	-7.3	2,670	-2.0	39	225	-2.6	5,374	-4.7
New Hampshire	18	178	-4.3	4,807	-.3	57	477	-3.4	9,841	-3.6
New Jersey	26	565	-1.2	16,946	-2.7	420	7,050	-2.2	154,896	-.7
New Mexico	4	28	(11)	957	+.7	50	245	+.8	5,367	-5.0
New York	340	9,019	-.9	267,670	-4.2	2,113	51,514	-7.6	1,121,527	-8.6
North Carolina	16	204	+5.7	4,229	-.9	171	475	-6.7	9,550	-6.0
North Dakota	16	211	-1.9	5,585	-6.1	32	338	-14.9	5,463	-12.3
Ohio	223	4,753	-4.7	120,332	-7.6	1,463	27,904	-.6	508,994	-3.9
Oklahoma	45	831	+.2	21,351	-3.4	107	1,739	-.9	26,803	-5.3
Oregon	53	1,082	-1.0	28,661	-6.4	265	2,012	-3.4	37,874	-7.4
Pennsylvania	126	3,393	-1.3	91,117	-4.2	312	22,988	-7.8	440,199	-9.0
Rhode Island	42	990	-.7	24,004	-1.2	479	4,436	-3.3	91,235	-5.1
South Carolina	14	216	-4.8	4,461	-2.5	14	354	+.3	3,625	-.7
South Dakota	10	122	-.8	3,442	-6.4	12	76	-17.4	1,173	-18.9
Tennessee	34	644	-1.5	13,610	-7.0	48	3,156	-6.0	50,743	-8.3
Texas	140	2,778	-3.8	73,262	-4.8	71	5,600	-5.6	100,989	-2.9
Utah	13	418	-1.2	10,286	-1.6	83	620	-15.6	11,785	-19.4
Vermont	5	105	-3.7	2,539	-5.4	41	378	-.5	6,623	-7.3
Virginia	41	874	-.8	19,909	-3.9	477	4,225	-4.3	75,377	-6.1
Washington	80	1,973	-2.8	51,446	-7.4	422	5,491	-4.6	106,966	-5.6
West Virginia	34	627	+1.8	16,062	-1.6	47	824	-2.4	13,187	-8.1
Wisconsin	48	1,918	+4.5	45,001	+8.4	56	7,530	-7.0	114,239	-6.4
Wyoming	8	57	+1.8	1,504	-5.9	48	225	-11.1	5,721	-15.6

11 No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JANUARY AND FEBRUARY 1933 BY STATES—Continued[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by
cooperating State organizations]

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change
Alabama	9	530	+4.3	\$4,920	-4.7	9	697	+15.0	\$5,135	-14.3
Arizona						20	2,265	+2.6	51,311	+2.9
Arkansas	6	178	+12.7	1,380	-1.2					
California	29	847	-5.0	16,009	-3	31	2,224	-5.0	50,294	-7.4
Colorado	3	6	-33.3	33	-69.4	15	578	+5.5	13,827	+8.7
Connecticut	11	80	+5.3	1,166	-15.2					
Delaware										
District of Colum- bia										
Florida	8	503	+.8	5,481	-12.0					
Georgia	19	755	-7.5	6,834	-13.0					
Idaho						9	1,937	-1.1	38,582	+.6
Illinois	24	273	-2.5	5,133	-3.1					
Indiana	35	618	+.7	8,096	+4.1					
Iowa	13	165	+17.0	1,766	-2.3					
Kansas	18	738	-1.6	16,852	+4.1	12	627	-7.4	8,701	-11.6
Kentucky	26	570	-22.1	3,478	-40.5					
Louisiana	4	513	+5.8	4,796	-.7					
Maine	7	22	-4.3	743	-7.7					
Maryland	14	279	-19.8	3,384	-9.8					
Massachusetts	15	148	-16.9	2,494	-9.9					
Michigan	20	303	-2.3	4,053	-15.5	42	4,772	-6.0	50,403	+.2
Minnesota	4	69	+245.0	1,019	+123.0	21	713	-2.6	8,800	+5.7
Mississippi	3	46	-27.0	505	-38.6					
Missouri	13	225	-4.7	3,016	-3.4	13	1,010	-1.4	19,678	-.3
Montana	5	14	+600.0	75	+275.0	16	1,023	-15.9	27,500	-18.5
Nebraska	3	31	-8.8	164	-27.1					
Nevada						15	122	+31.2	3,431	+47.8
New Hampshire	8	92	-29.2	2,332	-29.5					
New Jersey	3	36	+50.0	614	+31.5	3	10	(11)	167	-8.7
New Mexico						5	792	(11)	14,471	-7.6
New York	42	778	+1.4	14,343	-2.1	2	107	-9.3	1,072	-6.5
North Carolina	5	100	-2.9	743	-12.0					
North Dakota										
Ohio	66	1,402	-2.6	19,457	-7.8					
Oklahoma	4	53	-10.2	589	-21.4	32	1,234	-12.3	16,531	-11.2
Oregon										
Pennsylvania	54	1,737	+0.9	15,080	+14.5					
Rhode Island										
South Carolina	6	82	+22.4	524	+19.9					
South Dakota	5	18	-56.1	229	-53.2					
Tennessee	19	1,046	-.5	11,714	-19.2	4	188	-5.1	2,351	-9.2
Texas	22	401	-21.8	8,215	-15.7					
Utah						10	1,902	-.2	36,912	+2.6
Vermont	36	1,908	+0.1	37,500	+11.1					
Virginia	16	793	+.6	6,595	+8.5					
Washington	6	104	-16.1	1,838	-13.0					
West Virginia	7	229	+16.2	1,913	+4.4					
Wisconsin	14	77	-11.5	878	-23.1					
Wyoming										

"11 No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JANUARY AND FEBRUARY 1933 BY STATES—Continued[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by
cooperating State organizations]

State	Bituminous coal mining					Crude petroleum producing					
	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	Number of estab- lish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	
Alabama	45	7,879	+0.5	\$31,894	+19.4						
Arizona											
Arkansas	7	321	-35.0	5,178	-18.2	10	376	+1.9	\$8,856	-7.1	
California						45	7,078	+ (?)	210,186	-3.6	
Colorado	40	4,588	-.7	91,783	+25.5						
Connecticut											
Delaware											
District of Colum- bia											
Florida											
Georgia											
Idaho											
Illinois	29	5,838	-.2	133,456	+9.8	9	175	+2.3	3,438	+1.1	
Indiana	44	5,207	+1.2	121,125	+11.1	4	25	+4.2	470	+7.3	
Iowa	19	2,079	+.3	47,967	+22.7						
Kansas	23	1,805	+.2	27,089	+19.0	30	1,141	-6.5	25,349	-2.2	
Kentucky	155	24,731	-.6	306,048	+5.3	5	234	+18.2	3,594	-1.0	
Louisiana						8	161	-9.0	4,079	-20.2	
Maine											
Maryland	14	1,433	-1.6	12,562	-3.3						
Massachusetts											
Michigan	3	840	-3.8	20,229	-4.6						
Minnesota											
Mississippi											
Missouri	17	1,243	+1.0	25,000	+9.4						
Montana	11	688	-7.8	21,677	+.9	4	33	+17.9	1,028	+45.8	
Nebraska											
Nevada											
New Hampshire											
New Jersey											
New Mexico	11	1,566	-1.1	25,361	-.4	4	31	+3.3	834	+20.9	
New York						4	152	-1.9	3,933	+3.7	
North Carolina											
North Dakota											
Ohio	60	10,171	+.7	146,237	+4.8	5	40	+2.6	985	+88.0	
Oklahoma	14	603	+11.9	9,502	+19.4	52	4,122	-1.1	101,651	+1.6	
Oregon											
Pennsylvania	363	48,971	-1.4	546,457	-3.8	17	384	-3.3	9,558	-1.8	
Rhode Island											
South Carolina											
South Dakota											
Tennessee	16	2,467	-(?)	25,339	-1.2		42	9,446	+1.0	293,043	+15.0
Texas											
Utah	16	2,204	+3.1	55,887	-6.4						
Vermont											
Virginia	31	8,076	-1.5	111,954	-4.0						
Washington	10	1,389	+1.2	32,503	+13.9						
West Virginia	310	43,922	-.8	588,744	-1.3	8	305	-9.5	7,255	-7.9	
Wisconsin											
Wyoming	32	3,567	-.9	82,879	+13.0	7	139	-2.8	3,589	-21.4	

¹ Less than one tenth of 1 percent.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS IN JANUARY AND FEBRUARY 1933 BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Public utilities					Hotels					
	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	
Alabama	88	1,572	-6.7	\$32,239	-4.6	24	1,149	+2.8	\$9,727	+1.8	
Arizona	67	1,195	-1.8	30,650	+.7	23	788	+13.2	10,773	+0.4	
Arkansas	52	1,339	+11.5	31,546	+9.0	15	739	+9	7,651	+2.5	
California	49	46,283	-6	1,255,599	+1.4	200	9,594	+3	150,497	+4	
Colorado	196	5,249	-9	132,013	-1.3	40	1,296	-3	17,593	-2	
Connecticut	145	9,785	-4	305,185	+3.6	30	1,104	-1	13,631	-2.9	
Delaware	28	1,081	-2	30,843	+3.9	6	249	(u)	2,890	-2.2	
District of Columbia	22	8,138	-1.9	233,589	-2.5	52	3,329	+1.0	52,709	+5.0	
Florida	186	4,214	-2	109,948	+1.2	89	3,742	+21.0	41,091	+13.4	
Georgia	186	6,610	-2.0	180,831	-1.3	34	1,735	+1.3	15,084	-2.1	
Idaho	56	620	-5.8	13,004	+3.0	22	205	-3	3,815	-1.2	
Illinois	69	67,023	+.9	1,815,069	+.7	12 41	7,801	-2.2	120,955	+1.4	
Indiana	142	9,559	+1.5	221,463	-4.4	80	2,756	-1.0	29,154	-1.2	
Iowa	432	9,659	+.7	216,558	-2.1	72	2,206	-4.8	20,417	-.9	
Kansas	27	6,718	-1.2	154,408	-.4	32	768	+1.7	7,917	+3.8	
Kentucky	296	7,075	+4.2	160,508	+2.1	36	1,477	-3.5	15,486	-3.4	
Louisiana	154	4,207	-3.0	94,136	-3.5	22	1,847	+2.3	20,180	+3.4	
Maine	170	2,739	-2.1	74,321	-.3	21	691	-2.8	8,746	-2.9	
Maryland	92	12,265	-7	344,794	-2.2	24	1,171	-4	14,813	-1.0	
Massachusetts	13 136	45,458	+.5	1,287,215	+2.8	83	3,394	-3	49,122	-1.7	
Michigan	412	21,821	-.7	613,818	-.8	92	4,291	-1.7	51,516	-4.5	
Minnesota	230	12,019	-.7	315,725	-3.1	71	2,875	+1.6	34,921	+1.4	
Mississippi	213	1,901	-0.5	37,674	-2.8	19	499	-4.2	4,234	-3.6	
Missouri	215	21,038	-.3	558,970	-1.0	89	4,474	-4.0	54,479	-1.0	
Montana	101	1,766	-1.5	50,468	+.5	27	348	-2.8	4,574	-2.3	
Nebraska	302	5,543	-1.2	141,484	-3.0	38	1,436	+1.8	15,819	+3.9	
Nevada	39	379	+17.3	10,298	+13.1	11	126	-9.4	2,078	-12.6	
New Hampshire	143	2,042	-.6	55,917	-.4	12	168	+5.0	1,930	+9.9	
New Jersey	276	21,954	-1.2	644,892	-1.2	74	4,153	-7	52,270	+1.6	
New Mexico	50	477	-.2	10,133	-2.7	14	262	(u)	2,723	+.7	
New York	882	103,489	-.2	3,135,782	-.2	265	30,043	-.8	476,527	-1.0	
North Carolina	96	1,766	-1.0	37,095	+7.1	35	1,230	+2.5	11,226	+1.0	
North Dakota	170	1,160	-2.6	26,702	-7.7	22	327	-3.0	3,290	-2.9	
Ohio	481	32,068	-.4	812,300	-5.0	147	8,460	-1.9	106,647	(?)	
Oklahoma	246	5,901	-1.0	130,457	-1.5	49	1,069	+6.3	10,872	+4.0	
Oregon	183	5,603	-1.2	142,363	-.7	57	1,086	-3.7	13,674	-8.2	
Pennsylvania	640	78,932	-.5	2,161,421	+1.1	166	9,079	+.8	113,852	+.1	
Rhode Island	43	3,352	-.4	95,824	+1.9	11	220	-9	2,719	+2	
South Carolina	71	1,636	+3.3	34,851	+.2	13	461	+8.7	3,855	+10.6	
South Dakota	129	904	-3.0	23,653	-2.8	16	275	+1.5	3,109	+.3	
Tennessee	384	4,595	-10.1	100,932	-9.4	32	1,755	-2.2	15,687	-1.9	
Texas	135	6,130	-.5	168,542	+.3	51	3,308	-.3	39,658	-2.0	
Utah	68	1,780	+4.3	37,789	+7.0	11	415	-2.1	5,333	-2.8	
Vermont	120	902	-3.1	24,026	-1.5	21	404	+1.3	4,179	+.9	
Virginia	179	5,677	+.3	139,082	-.7	32	1,567	+.9	16,993	-1.4	
Washington	201	9,586	-1.7	254,195	-1.5	73	2,102	-.1	23,722	-1.9	
West Virginia	123	5,604	-1.6	144,030	-3.5	40	1,144	+8.7	11,665	+2.1	
Wisconsin	14 42	10,539	-.4	284,841	+.9	12 44	1,157	-1.8	(16)	2,853	+10.0
Wyoming	48	406	-2.2	9,734	+3.8	14	183	(u)	2,853	+10.0	

⁷ Less than one tenth of 1 percent.¹¹ No change.¹² Includes restaurants.¹³ Includes steam railroads.¹⁴ Includes railways and express.¹⁵ Data not supplied.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS
IN JANUARY AND FEBRUARY 1933 BY STATES—Continued[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by
cooperating State organizations]

State	Laundries					Dyeing and cleaning				
	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change	Number of establish- ments	Number on pay roll, Feb- ruary 1933	Per- cent of change	Amount of pay roll (1 week), February 1933	Per- cent of change
Alabama	5	454	-0.7	\$3,566	-0.7	4	140	-6.7	\$1,328	-8.2
Arizona	10	402	+.2	5,603	-1.9					
Arkansas	18	417	-4.5	4,046	-4.4	3	36	(11)	337	-12.5
California	16 75	5,372	-2.3	93,507	-6.0					
Colorado	7	432	-1.4	6,023	-.3	9	117	+2.6	1,960	-2.0
Connecticut	26	1,303	-1.2	20,403	-1.3	11	197	-8.4	3,741	-14.1
Delaware	4	303	-1.6	4,403	-3.2	4	39	-4.9	552	-10.4
District of Colum- bia	19	2,377	+.8	35,617	-2.7	5	99	-2.9	1,862	-4.4
Florida	8	424	+8.2	4,821	+18.7					
Georgia	12	629	-1.1	5,288	-6.3	3	69	-2.8	766	-8.4
Idaho										
Illinois	16 24	1,391	-2.0	18,197	-2.7					
Indiana	16	1,012	-3.3	12,911	-2.2	8	137	-.7	1,896	-4.8
Iowa										
Kansas	16 40	997	-2.6	12,086	-.3					
Kentucky	15	671	+.1	8,289	-2.8	5	215	-2.7	2,876	-9.6
Louisiana										
Maine	17	337	-.6	4,391	-3.5					
Maryland	24	1,740	-1.5	26,214	-5.0	9	393	-.5	4,551	-5.3
Massachusetts	108	3,649	+1.0	56,650	-2.1	75	1,523	-3.8	23,188	-8.7
Michigan	22	1,546	-.8	18,363	-3.1	12	422	+.2	6,108	-6.4
Minnesota	14	731	-4.2	10,962	-8.2	7	191	-2.6	2,754	-6.5
Mississippi	6	302	(11)	2,635	+.4					
Missouri	20	1,491	-1.7	20,088	-5.5	9	300	-3.8	4,603	-8.1
Montana	13	314	+.6	5,243	-7.3	3	18	-14.3	362	-12.3
Nebraska	5	372	+9.4	4,837	+6.4	3	24	-7.7	391	+20.3
Nevada	4	51	(11)	989	-2.8					
New Hampshire	17	286	-1.0	4,045	-5.0					
New Jersey	25	2,569	-.8	48,177	-5.0	8	217	-6.5	5,260	-4.8
New Mexico	5	217	-2.3	3,096	-1.2					
New York	70	6,762	-2.2	111,044	-4.6	14	302	-7.1	5,289	-18.5
North Carolina	9	604	-1.0	6,113	-3.0					
North Dakota	9	185	-2.6	2,794	-11.5					
Ohio	74	3,999	-1.4	56,708	-5.2	38	1,379	-1.7	20,476	-9.3
Oklahoma	7	616	+1.3	7,537	+3.2	3	69	-1.4	685	-6.2
Oregon	4	303	-1.3	4,284	-5.7	4	48	+2.1	823	-4.6
Pennsylvania	41	2,993	-1.5	43,029	-4.1	18	920	-1.5	13,577	-11.6
Rhode Island	15	985	+.9	15,741	-4.2	4	187	-3.1	3,128	-3.3
South Carolina	6	225	-1.3	2,101	-3.0					
South Dakota	7	129	-.8	1,646	-.6					
Tennessee	12	811	-1.3	6,620	-6.2	3	26	-7.1	305	+.7
Texas	20	1,008	+1.0	10,672	-.6	12	284	+3.3	4,203	-.9
Utah	7	505	-1.2	6,941	-3.2	7	114	-.9	1,770	-7.2
Vermont	5	57	-12.3	604	-11.3					
Virginia	14	869	-.6	9,604	-1.1	17	190	-5.0	2,527	-11.3
Washington	12	535	-1.3	9,700	-2.4	12	142	-4.1	2,144	-3.9
West Virginia	20	689	+.1	8,260	-21.3	9	204	-1.4	2,445	-11.7
Wisconsin	16 28	918	-3.2	11,270	-7.3					
Wyoming	3	67	(11)	1,169	+2.2					

¹¹ No change.¹² Includes dyeing and cleaning.

Employment and Pay Roll in February 1933 in Cities of Over 500,000 Population

IN THE following table are presented the fluctuations in employment and pay-roll totals in February 1933 as compared with January 1933 in 13 cities of the United States having a population of 500,000 or over. These changes are computed from reports received from identical establishments in each of the months considered.

In addition to including reports received from establishments in the several industrial groups regularly covered in the Bureau's survey, excluding building construction, reports have also been secured from other establishments in these cities for inclusion in these totals. Information concerning employment in building construction is not available for all cities at this time and therefore has not been included.

FLUCTUATIONS IN EMPLOYMENT AND PAY ROLLS IN FEBRUARY 1933 AS COMPARED WITH JANUARY 1933

Cities	Number of establishments reporting in both months	Number on pay roll		Percent of change	Amount of pay roll (1 week)		Percent of change
		January 1933	February 1933		January 1933	February 1933	
New York City	3,320	298,501	209,229	+0.2	\$7,992,773	\$7,956,161	-0.5
Chicago, Ill.	1,814	188,163	188,177	+0 ¹	4,406,150	4,416,153	+0.2
Philadelphia, Pa.	770	132,542	130,619	-1.5	2,907,087	2,903,050	-0.1
Detroit, Mich.	685	162,537	159,256	-2.0	3,262,699	2,868,238	-12.1
Los Angeles, Calif.	698	57,333	57,195	-0.2	1,348,903	1,318,129	-2.3
Cleveland, Ohio	1,067	80,687	83,198	+3.1	1,665,183	1,684,687	+1.2
St. Louis, Mo.	473	63,957	63,882	-0.1	1,295,627	1,308,451	+1.0
Baltimore, Md.	550	43,931	44,952	+2.3	858,951	865,228	+0.7
Boston, Mass.	2,949	80,722	80,550	-0.2	1,899,338	1,901,670	+0.1
Pittsburgh, Pa.	372	51,518	51,259	-0.5	1,040,795	1,029,325	-1.1
San Francisco, Calif.	1,137	42,247	42,678	+1.0	1,033,412	1,024,780	-0.8
Buffalo, N.Y.	312	34,385	34,334	-0.1	749,020	726,443	-3.0
Milwaukee, Wis.	456	34,645	34,232	-1.2	659,457	654,758	-0.7

¹ Less than one tenth of 1 percent.

Employment in the Executive Civil Service of the United States, February 1933

THE number of employees in the executive civil service of the United States was 9,277 less in February 1933 than in February 1932. Comparing February 1933 with January 1933 there was an increase of 326.

These figures do not include the legislative, judicial, or Army and Navy services. The data as shown in the table below were compiled by the various Federal departments and offices and sent to the United States Civil Service Commission where they are assembled. They are tabulated by the United States Bureau of Labor Statistics, and published here by courtesy of the Civil Service Commission and in compliance with the direction of Congress. No information has as yet been collected relative to the amounts of pay rolls. Because of the importance of Washington as a Government center, the figures for the District of Columbia, and for the Government service outside of the District of Columbia, are shown separately.

Approximately 12 percent of the total number of Federal employees are employed in the District of Columbia. The number of employees in the District of Columbia showed a decrease of 3.5 percent in February 1933 as compared with February 1932. The number of permanent employees in the District of Columbia decreased 3 percent, and the number of temporary employees decreased 12.3 percent comparing February 1933 with the same month of 1932.

EMPLOYEES IN THE EXECUTIVE CIVIL SERVICE OF THE UNITED STATES FEBRUARY 1932 AND JANUARY AND FEBRUARY 1933¹

Item	District of Columbia			Outside the District			Entire service		
	Per- manent	Tempo- rary ²	Total	Per- manent	Tempo- rary ²	Total	Per- manent	Tempo- rary ²	Total
Number of employees:									
February 1932	65,927	3,265	69,192	478,784	24,788	503,572	544,711	28,053	572,764
January 1933	64,086	2,714	66,800	469,080	27,281	496,361	533,166	29,995	563,161
February 1933	63,940	2,862	66,802	468,943	27,742	496,685	532,883	30,604	563,487
Gain or loss:									
February 1932–February 1933	-1,987	-403	-2,390	-9,841	+2,954	-6,887	-11,828	+2,551	-9,277
January 1933–February 1933	-146	+148	+2	-137	+461	+324	-283	+609	+326
Percent of change:									
February 1932–February 1933	-3.0	-12.3	-3.5	-2.1	+11.9	-1.4	-2.2	+0.1	-1.6
January 1933–February 1933	-0.2	+5.5	+ (3)	- (3)	+1.7	+0.1	-0.1	+2.0	-0.1
Labor turnover, February 1933:									
Additions	125	211	336	1,685	8,707	10,392	1,810	8,918	10,728
Separations	271	63	338	1,822	8,246	10,068	2,093	8,309	10,402
Turnover rate per 100	0.20	2.26	0.50	0.36	30.00	2.03	0.34	27.42	1.85

¹ Certain revisions have been made from time to time by the Civil Service Commission in dropping certain classes of employees, previously carried in the tabulations. Thus, in the District of Columbia, 68 mail contractors and special-delivery messengers were eliminated in May 1932, and in the service outside the District of Columbia, 35,800 star route and other contractors, clerks in charge of mail contract stations, clerks in third-class post offices and special-delivery messengers were eliminated in April 1932 and 835 collaborators of the Department of Agriculture in June 1932. In the table in order to make the figures comparable for the months shown, it was assumed that the number of these employees was the same in 1932 as in the month they were dropped (actual figures not being available from the Civil Service Commission) and the data for this month has been revised accordingly in this table.

² Not including the field service of the post office.

³ Less than one tenth of 1 percent.

Employment on Class I Steam Railroads in the United States

DATA are not yet available concerning railroad employment for February 1933. Reports of the Interstate Commerce Commission for class I railroads show that the number of employees (exclusive of executive and officials) decreased from 980,501 on December 15, 1932, to 947,327 on January 15, 1933, or 3.4 percent; the amount of pay roll decreased from \$114,284,718 in December 1932 to \$110,229,285 in January, or 3.5 percent.

The monthly trend of employment from January 1923 to January 1932 on class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by index numbers published in the following table. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the 12-month average for 1926 as 100.

TABLE 1.—INDEXES OF EMPLOYMENT, ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY 1923 TO JANUARY 1933

[12-month average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
January	98.3	96.6	95.6	95.8	95.5	89.3	88.2	86.3	73.7	61.2	53.0
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7	60.3	—
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9	60.5	—
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5	60.0	—
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9	59.7	—
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8	57.8	—
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4	56.4	—
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2	55.0	—
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3	55.8	—
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7	57.0	—
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5	55.9	—
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6	54.8	—
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6	57.9	—

Table 2 shows the total number of employees on the 15th day each of January, 1932, and December, 1932, and January, 1933, and total pay roll for the entire months.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, JANUARY, 1932, AND DECEMBER, 1932, AND JANUARY, 1933

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Occupations	Number of employees at middle of month			Total earnings		
	January, 1932	December, 1932	January, 1933	January, 1932	December, 1932	January, 1933
Professional, clerical, and general	201,832	173,861	1 168,472	\$28,833,163	\$22,889,560	\$22,099,465
Clerks	107,953	91,326	1 88,027	14,546,827	11,380,732	1 10,875,441
Stenographers and typists	18,986	16,364	1 16,052	2,421,104	1,930,689	1 1,876,842
Maintenance of way and structures	212,816	190,358	1 180,676	17,614,332	13,911,073	1 13,087,103
Laborers, extra gang and work train	13,737	10,273	1 9,241	737,449	495,946	1 447,680
Laborers, track and roadway section	114,307	103,685	1 98,640	6,344,551	4,962,136	1 4,573,396
Maintenance of equipment and stores	304,211	275,443	1 262,398	35,130,350	27,422,052	1 26,833,300
Carmen	62,142	55,846	1 52,512	7,982,223	6,217,251	1 6,029,029
Machinists	41,531	38,811	1 37,073	5,529,368	4,432,453	1 4,370,010
Skilled trades helpers	66,450	59,778	1 56,794	6,275,313	4,820,720	1 4,743,379
Laborers (shops, engine houses, power plants, and stores)	25,355	22,136	1 21,037	2,243,628	1,680,747	1 1,621,424
Common laborers (shop, engine houses, power plants, and stores)	31,402	28,873	1 17,140	2,068,897	1,620,781	1 933,937
Transportation, other than train, engine and yard	142,507	127,180	1 122,970	17,644,570	14,312,546	1 13,591,570
Station agents	26,604	25,063	1 24,861	4,105,275	3,525,896	1 3,418,891
Telegraphers, telephoners, and towermen	17,977	16,157	1 15,720	2,824,576	2,228,184	1 2,162,632
Truckers (stations, warehouses, and platforms)	18,790	16,644	1 15,007	1,600,483	1,277,036	1 1,088,113
Crossing and bridge flagmen and gatemen	18,413	17,641	1 17,078	1,411,420	1,195,148	1 1,155,085
Transportation (yardmasters, switch tenders, and hostlers)	15,643	13,181	1 12,293	2,910,240	2,205,158	1 2,061,553
Transportation, train and engine	217,287	200,478	1 186,541	40,425,050	33,544,329	1 30,877,274
Road conductors	24,711	22,550	1 21,369	5,689,093	4,719,369	1 4,465,074
Road brakemen and flagmen	47,710	43,844	1 41,809	7,503,662	6,252,504	1 5,858,655
Yard brakemen and yard helpers	36,856	34,195	1 31,274	5,580,078	4,577,198	1 4,045,540
Road engineers and motormen	29,464	27,114	1 25,774	7,532,774	6,309,896	1 5,936,034
Road firemen and helpers	30,260	28,389	1 27,303	5,423,980	4,555,580	1 4,261,896
All employees	1,094,296	980,501	947,327	142,556,705	114,284,718	110,229,285

¹ The totals shown for each of the separate occupations and for the several occupational groups in January, 1933, are not comparable with figures shown for preceding months, as data for 17 switching and terminal companies have been omitted from the January, 1933, totals. These data will not be included in future reports of the Interstate Commerce Commission and, therefore, will be omitted by this Bureau. The 17 switching and terminal companies which have been omitted employed in January, 1933, 14,223 persons whose total earnings in that month were \$1,765,753. The totals shown for "all employees" have been adjusted to include these switching and terminal companies' employees and are, therefore, comparable with those of previous months.

Unemployment in Foreign Countries

THE following table gives detailed monthly statistics of unemployment in foreign countries, as shown in official reports from February, 1931, to the latest available date:

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES

Date (end of month)	Australia		Austria Compulsory insurance, number unemployed in receipt of benefit	Belgium				
	Trade-unionists unemployed			Unemployment-insurance societies				
	Number	Per cent		Wholly unemployed	Partially unemployed	Number	Per cent	
1931								
February	(1)		334,041	81,750	11.7	121,906	19.4	
March	113,614	25.8	304,084	81,305	11.3	125,972	17.7	
April	(1)		246,845	70,377	10.0	110,139	15.6	
May	(1)		208,852	56,250	7.9	97,755	13.8	
June	118,424	27.6	191,150	62,642	8.9	101,616	14.4	
July	(1)		194,364	64,644	9.1	116,747	16.3	
August	(1)		196,321	70,893	9.9	120,669	16.8	
September	120,694	28.3	202,130	74,175	10.3	119,433	16.6	
October	(1)		228,101	82,811	11.3	122,733	16.8	
November	(1)		273,658	93,487	13.3	134,799	19.2	
December	118,732	28.0	329,627	128,884	17.0	159,941	21.1	
1932								
January	(1)		358,114	153,920	20.0	179,560	23.2	
February	(1)		361,948	168,204	21.3	180,079	22.8	
March	120,366	28.3	352,444	155,653	19.4	185,267	23.0	
April	(1)		303,888	152,530	18.8	183,668	22.6	
May	(1)		271,481	160,700	18.9	191,084	22.5	
June	124,068	30.0	265,040	153,659	18.7	173,819	21.2	
July	(1)		266,365	169,411	19.6	174,646	20.3	
August	(1)		269,188	167,212	19.5	170,081	19.9	
September	122,340	29.6	275,840	163,048	18.3	166,160	18.9	
October	(1)		297,791	157,023	17.7	148,812	16.8	
November	(1)		329,707	154,657	17.7	144,583	16.3	
December	115,042	28.1	367,829	171,028	18.6	155,669	16.9	
1933								
January			397,920					
February								
1931								
Date (end of month)	Canada		Czechoslovakia		Danzig (Free City of)	Denmark		
	Per cent of trade-unionists unemployed	Number of unemployed on live register	Trade-union insurance funds—unemployed in receipt of benefit	Number of unemployed registered		Number	Per cent	
February	15.6	343,972	117,450	10.0	28,192	73,427	26.0	
March	15.5	339,505	119,350	10.0	27,070	67,725	22.1	
April	14.9	296,756	107,238	8.9	24,186	45,698	15.3	
May	16.2	249,686	93,941	7.6	20,686	37,856	12.3	
June	16.3	220,038	82,534	6.6	19,855	34,030	11.3	
July	16.2	209,233	82,759	6.6	20,420	36,369	11.8	
August	15.8	214,520	86,261	6.9	21,509	35,060	11.8	
September	18.1	228,383	84,660	6.7	22,922	35,871	12.1	
October	18.3	253,518	88,600	6.9	24,932	47,196	16.0	
November	18.6	336,874	106,015	8.2	28,966	66,526	22.3	
December	21.1	480,775	146,325	11.3	32,956	91,216	30.4	
1932								
January	22.0	583,138	186,308	14.0	34,912	105,600	35.1	
February	20.6	631,736	197,612	14.8	36,258	112,346	37.3	
March	20.4	633,907	195,076	14.6	36,481	113,378	37.5	
April	23.0	555,832	180,456	13.3	33,418	90,704	29.9	
May	22.1	487,228	171,389	12.6	31,847	79,931	26.1	
June	21.9	466,948	168,452	12.3	31,004	80,044	25.6	
July	21.8	453,294	167,529	12.2	29,195	92,732	29.5	
August	21.4	460,952	172,118	12.5	28,989	95,770	30.5	
September	20.4	486,935	170,772	12.3	30,469	96,076	30.4	
October	22.0	533,616	173,706	12.4	31,806	101,518	31.8	
November	22.8	608,809	190,779	13.5	35,507	113,273	35.6	
December	25.5	746,311	239,959	16.9	39,042	138,335	42.8	
1933								
January	25.5	865,477				141,354	43.5	
February						142,019	43.7	

¹ Not reported.² Provisional figure.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Estonia	Finland	France	Germany			
	Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Trade-unionists		
					Per cent wholly unemployed	Per cent partially unemployed	
1931							
February	4,070	11,557	40,766	4,972,000	34.5	19.5	3,406,979
March	2,765	11,491	50,815	4,756,000	33.6	18.9	3,240,523
April	2,424	12,663	49,958	4,358,000	31.2	18.0	2,789,627
May	1,368	7,342	41,339	4,053,000	29.9	17.4	2,507,732
June	931	6,320	36,237	3,954,000	29.7	17.7	2,353,657
July	634	6,790	35,916	3,976,000	31.0	16.1	2,231,513
August	933	9,160	37,673	4,215,000	33.6	21.4	2,376,589
September	2,096	12,176	38,524	4,355,000	35.0	22.2	2,483,364
October	5,425	14,824	51,654	4,623,480	36.6	22.0	2,534,952
November	7,554	18,095	92,157	5,059,773	38.9	21.8	2,771,985
December	9,055	17,223	147,009	5,668,187	42.2	22.3	3,147,867
1932							
January	9,318	20,944	241,487	6,041,910	43.6	22.6	3,481,418
February	9,096	18,856	293,198	6,128,429	44.1	22.6	3,525,486
March	8,395	17,699	303,218	6,034,100	44.6	22.6	3,323,109
April	6,029	16,885	282,013	5,934,202	43.9	21.1	2,906,890
May	4,896	13,189	262,184	5,582,620	43.3	22.9	2,658,042
June	3,137	12,709	232,371	5,475,778	43.1	20.4	2,484,944
July	2,022	13,278	262,642	5,392,248	43.9	23.0	2,111,342
August	3,256	16,966	264,253	5,223,810	44.0	23.2	1,991,985
September	5,957	18,563	259,237	5,102,750	43.6	22.7	1,849,768
October	8,901	19,908	247,090	5,109,173	42.9	22.6	1,720,577
November	10,715	21,690	255,411	5,355,428	43.2	22.1	1,768,602
December	13,727	20,289	277,109	5,772,852	45.1	22.7	2,073,101
1933							
January	—	23,178	315,364	6,013,612	46.2	23.7	2,372,066
February	—	—	330,874	6,000,958	—	—	—

Date (end of month)	Great Britain and Northern Ireland			Great Britain	Hungary		Irish Free State		
	Compulsory insurance		Number of persons registered with employment exchanges		Trade-unionists unemployed				
	Wholly unemployed	Temporary stoppages			Christian (Budapest)	Social-Democratic			
Number	Per cent	Number	Per cent	Number	Christian (Budapest)	Social-Democratic	Compulsory insurance—number unemployed		
1931									
February	2,073,578	16.7	623,844	5.0	2,627,550	965	26,825		
March	2,052,826	16.5	612,821	5.0	2,581,030	996	26,413		
April	2,027,896	16.3	564,884	4.6	2,531,674	1,042	23,970		
May	2,019,533	16.3	558,383	4.5	2,506,431	843	23,016		
June	2,037,480	16.4	669,315	5.4	2,629,215	751	21,427		
July	2,073,892	16.7	732,583	5.9	2,662,765	876	21,647		
August	2,142,821	17.3	670,342	5.4	2,732,434	941	21,897		
September	2,217,080	17.9	663,466	5.3	2,879,466	932	23,427		
October	2,305,388	18.1	487,591	3.8	2,755,559	1,020	26,353		
November	2,294,902	18.0	439,952	3.4	2,656,088	1,169	30,865		
December	2,262,700	17.7	408,117	3.2	2,569,949	1,240	30,918		
1932									
January	2,354,044	18.4	500,746	4.0	2,728,411	1,182	31,958		
February	2,317,784	18.2	491,319	3.8	2,701,173	1,083	31,162		
March	2,233,425	17.5	426,989	3.3	2,567,332	1,024	30,866		
April	2,204,740	17.3	521,705	4.1	2,652,181	961	32,252		
May	2,183,683	17.1	638,157	5.0	2,741,306	922	35,874		
June	2,145,157	16.8	697,639	5.5	2,747,343	960	36,912		
July	2,185,015	17.1	735,929	5.8	2,811,782	940	37,648		
August	2,215,704	17.4	731,104	5.7	2,859,828	947	37,081		
September	2,279,779	17.9	645,286	5.0	2,858,011	1,022	38,923		
October	2,295,500	17.9	515,405	4.0	2,747,006	1,091	37,067		
November	2,328,920	18.2	520,105	4.0	2,799,806	1,072	39,336		
December	2,314,528	18.1	461,274	3.6	2,723,287	1,106	39,667		
1933									
January	2,422,808	18.9	532,640	4.2	2,903,065	1,178	31,431		
February	2,394,106	18.7	520,808	4.1	2,856,638	—	39,577		

* Registration area extended.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Italy		Japan		Latvia	Netherlands	
	Number of unemployed registered		Official estimates, unemployed		Number unemployed remaining on live register	Unemployment-insurance societies-unemployed	Number
	Wholly unemployed	Partially unemployed	Number	Per cent			
1931							
February	765,325	27,110	387,460	5.6	8,303	109,235	23.5
March	707,486	27,545	396,828	5.8	8,450	102,743	21.8
April	670,353	28,780	394,625	5.7	6,390	68,860	14.3
May	635,183	26,059	401,415	5.8	1,871	60,189	12.2
June	573,593	24,206	391,377	5.6	1,584	59,573	11.7
July	637,531	25,821	406,923	5.8	2,169	69,026	13.3
August	698,273	30,636	418,596	6.0	4,827	70,479	15.3
September	747,764	29,822	425,526	6.0	7,470	72,738	15.7
October	799,744	32,828	439,014	6.0	13,605	84,548	18.0
November	878,267	30,967	454,675	6.5	18,377	107,372	18.5
December	982,321	32,949	470,736	6.7	21,935	147,107	27.8
1932							
January	1,051,321	33,277	485,885	6.9	26,335	145,124	27.0
February	1,147,945	26,321	485,290	6.9	22,222	139,956	25.4
March	1,053,016	31,636	473,757	6.8	22,912	119,423	21.6
April	1,000,025	32,720	482,366	6.9	14,607	121,378	21.7
May	968,456	35,528	483,109	6.9	7,509	112,325	22.5
June	905,097	31,710	481,589	6.8	7,056	113,978	22.8
July	931,291	33,218	510,901	7.2	7,181	123,947	24.6
August	945,972	33,666	509,580	7.1	9,650	116,524	22.9
September	949,408	37,043	505,969	7.0	8,762	126,510	24.9
October	956,357	32,556	503,958	7.0	13,806	128,961	25.2
November	1,038,757	36,349	484,213	6.7	17,621	142,554	27.6
December	1,129,654	37,644	—	—	17,247	188,252	31.5
1933							
January	1,225,470	33,003	—	—	—	226,700	37.6
February	1,229,387	—	—	—	—	187,652	31.1
Date (end of month)	New Zealand	Norway			Poland	Rumania	
	Number unemployed registered by employment exchanges ⁴	Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register	
		Number	Per cent				
1931							
February	(¹)	(¹)	—	29,107	358,925	43,270	
March	38,028	11,213	24.9	29,095	372,536	48,226	
April	36,981	(¹)	—	28,477	351,679	41,519	
May	40,507	—	—	25,206	313,104	33,484	
June	45,264	—	—	22,736	274,942	28,093	
July	47,772	—	—	20,869	255,179	29,250	
August	50,033	—	—	22,431	246,380	22,708	
September	51,375	—	—	27,012	246,426	22,909	
October	50,266	³ 9,048	³ 19.6	29,340	255,622	28,800	
November	47,535	10,577	22.8	32,078	266,027	43,917	
December	45,140	12,633	27.2	34,789	312,487	49,393	
1932							
January	45,677	14,160	30.4	35,034	338,434	51,612	
February	44,107	14,354	30.6	38,135	350,145	57,606	
March	45,383	15,342	32.5	38,952	360,031	55,306	
April	48,601	14,629	30.8	37,703	339,773	47,206	
May	53,543	13,465	28.3	32,127	306,801	39,654	
June	54,342	12,603	26.2	28,429	264,147	33,679	
July	55,203	12,563	25.9	26,390	218,059	32,809	
August	56,332	13,084	26.9	27,543	187,537	(¹)	
September	55,855	14,358	29.3	31,431	147,166	29,654	
October	54,549	15,512	31.6	35,082	146,982	21,862	
November	52,477	16,717	34.2	38,807	177,459	28,172	
December	³ 52,533	20,735	42.4	41,571	220,245	30,651	
1933							
January	—	—	—	40,642	204,238	38,471	
February	—	—	—	287,219	—	—	

¹ Not reported.² Provisional figure.³ Includes not only workers wholly unemployed but also those intermittently employed.⁴ Strike ended.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Saar Territory Number of unem-ployed registered	Sweden		Switzerland				Yugo-slavia Number of unem-ployed registered	
		Trade-unionists unemployed		Unemployment funds					
		Number	Per cent	Number	Per cent	Number	Per cent		
1931									
February	20,139	66,923	18.4	20,081	7.9	30,879	12.2	14,424	
March	18,292	72,944	19.3	18,991	5.4	41,880	12.4	12,029	
April	18,102	64,534	17.5	10,389	4.0	27,726	10.6	11,391	
May	14,886	49,807	13.2	9,174	3.5	26,058	9.9	6,929	
June	15,413	45,839	12.1	12,577	3.6	34,266	9.7	4,431	
July	17,685	46,180	12.4	12,200	3.3	39,000	11.3	6,672	
August	20,205	48,590	12.7	9,754	3.6	33,346	12.4	7,466	
September	21,741	54,405	13.7	15,188	4.0	42,998	11.2	7,753	
October	24,685	65,460	16.4	18,000	4.8	47,200	13.2	10,070	
November	28,659	79,484	19.9	25,200	6.6	51,900	14.4	10,349	
December	35,045	110,149	27.2	41,611	10.1	61,256	14.9	14,502	
1932									
January	38,790	93,272	24.5	44,600	10.6	67,600	14.8	19,665	
February	42,354	93,900	23.0	48,600	11.3	70,100	15.0	21,435	
March	44,883	98,772	24.4	40,423	9.0	62,659	14.0	23,251	
April	42,993	82,500	21.0	35,400	7.7	58,900	12.6	18,532	
May	42,881	75,650	18.9	35,200	7.6	54,500	11.5	13,568	
June	40,188	79,338	19.5	33,742	7.1	53,420	13.3	11,418	
July	39,063	77,468	19.4	35,700	7.5	54,000	11.4	9,940	
August	38,858	80,975	20.0	36,600	7.6	53,400	11.1	11,940	
September	40,320	86,709	20.7	38,070	7.8	52,967	10.8	10,985	
October	40,728	92,868	22.2	42,300	8.7	52,100	10.6	10,474	
November	41,962	97,666	23.8	50,500	10.3	55,700	11.3	11,670	
December	44,311	129,002	31.3	66,053	13.3	59,089	11.9	14,248	
1933									
January	45,700	120,156	28.8					23,574	

RETAIL PRICES

Retail Prices of Food in February, 1933

THE following tables are compiled from simple averages of the actual selling prices received monthly by the Bureau of Labor Statistics of the United States Department of Labor from retail dealers in 51 cities.

Indexes of all articles combined, or groups of articles combined, both for cities and for the United States, are weighted according to the average family consumption. Consumption figures used since January, 1921, are given in Bulletin 495 (p. 13). Those used for prior dates are given in Bulletin 300 (p. 61).

Table 1 shows the average retail prices of 42 principal food articles for the United States, 51 cities combined, and index numbers for 23 food articles based on the year 1913, for the year 1913 and for February 15, 1932, and January 15 and February 15, 1933. Comparable information by months, January, 1929, to December, 1932, inclusive, are given in the January, 1933, issue of this publication. These figures are a continuation of data shown in Bulletin 495, pages 32 to 51, inclusive.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES FOR THE YEAR 1913 AND BY MONTHS, FEBRUARY 15, 1932, AND JANUARY 15 AND FEBRUARY 15, 1933

Article	Average price				Index number [1913=100.0]			
	Year 1913	Feb. 15, 1932	1933		Year 1913	Feb. 15, 1932	1933	
			Jan. 15	Feb. 15			Jan. 15	Feb. 15
Sirloin steak.....			<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Round steak.....			25.4	33.2	28.9	28.5	100.0	130.7
Rib roast.....			22.3	28.4	24.9	24.2	100.0	127.4
Chuck roast.....			19.8	24.4	21.2	20.9	100.0	123.2
Plate beef.....			16.0	17.3	15.3	14.9	100.0	108.1
Pork chops.....			12.1	11.8	10.4	10.0	100.0	97.5
Bacon, sliced.....			21.0	19.1	16.5	17.6	100.0	91.0
Ham, sliced.....			27.0	26.1	21.4	20.8	100.0	96.7
Lamb, leg of.....			26.9	36.7	28.9	28.5	100.0	136.4
Hens.....			18.9	23.7	21.7	21.7	100.0	125.4
Salmon, red, canned.....			21.3	27.1	21.4	21.3	100.0	127.2
Milk, fresh.....			16-oz. can	28.9	19.4	19.0		
Milk, evaporated.....			quart	8.9	11.4	10.4	100.0	128.1
Butter.....			14½-oz. can	7.9	6.6	6.6		
Margarine.....			pound	38.3	29.5	27.1	24.8	100.0
Cheese.....			do	16.5	13.4	12.7		
Lard.....			do	22.1	24.4	22.3	21.3	100.0
Vegetable lard substitute.....			do	15.8	9.4	8.1	7.7	100.0
Eggs, strictly fresh.....			dozen	21.7	18.7	18.5		
Bread.....			pound	34.5	24.2	32.4	21.4	100.0
Flour.....			do	5.6	7.0	6.4	6.4	100.0
Corn meal.....			do	3.3	3.3	2.9	2.9	100.0
Rolled oats.....			do	3.0	4.0	3.5	3.4	100.0
Corn flakes.....			8-oz. package	7.7	5.7	5.6		
Wheat cereal.....			28-oz. package	8.7	8.5	8.6		
				22.8	22.4	22.3		

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES FOR THE YEAR 1913 AND BY MONTHS, FEBRUARY 15, 1932, AND JANUARY 15 AND FEBRUARY 15, 1933—Continued

Article	Average price				Index number [1913=100.0]			
	Year 1913	Feb. 15, 1932	1933		Year 1913	Feb. 15, 1932	1933	
			Jan. 15	Feb. 15			Jan. 15	Feb. 15
Macaroni.....	pound.....	Cents	Cents	Cents				
Rice.....	do.....	15.7	14.7	14.6				
Beans, navy.....	do.....	8.7	7.3	5.9	100.0	83.9	67.8	66.7
Potatoes.....	do.....	5.6	4.3	4.1				
Onions.....	do.....	1.7	1.7	1.5	100.0	100.0	88.2	88.2
Cabbage.....	do.....	7.1	2.7	2.6				
Pork and beans.....	16-oz. can.....	4.3	2.9	3.1				
Corn, canned.....	No. 2 can.....	8.3	6.6	6.5				
Peas, canned.....	do.....	11.3	10.0	9.8				
Tomatoes, canned.....	do.....	13.2	12.6	12.6				
Sugar.....	pound.....	9.5	8.6	8.6				
Tea.....	do.....	5.5	5.3	5.1	100.0	96.4	92.7	90.9
Coffee.....	do.....	54.4	73.6	67.2	66.1	100.0	135.3	123.5
Prunes.....	do.....	29.8	31.0	28.7	27.8	100.0	104.0	96.3
Raisins.....	do.....	10.2	8.9	8.9				
Bananas.....	dozen.....	11.5	9.5	9.3				
Oranges.....	do.....	23.7	23.0	22.7				
		30.1	27.1	26.5				

Table 2 shows index numbers of the weighted cost of three important groups of food, viz, cereals, meats, and dairy products, based on the year 1913 as 100, and changes in February, 1933, compared with February, 1932, and January, 1933. The list of articles included in these groups will be found in the May, 1932, issue of this publication, and monthly indexes for the year 1932 in the December, 1932, issue.

TABLE 2.—INDEX NUMBERS OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, AND PER CENT OF CHANGE ON FEBRUARY 15, 1933, COMPARED WITH FEBRUARY 15, 1932, AND JANUARY 15, 1933

Article	Index (1913=100.0)			Per cent of change Feb. 15, 1933, compared with—	
	Feb. 15, 1932	Jan. 15, 1933	Feb. 15, 1933	Feb. 15, 1932	Jan. 15, 1933
Cereals.....	125.0	112.3	112.0	-10.4	-0.3
Meats.....	117.3	99.9	99.0	-15.6	-0.9
Dairy products.....	102.9	93.3	90.3	-12.3	-3.2

Table 3 shows index numbers of the weighted cost of food for the United States and 39 cities, based on the year 1913 as 100. The per cent of change in February, 1933, compared with February, 1932, and January, 1933, is also given for these cities and the United States, and for 12 additional cities from which prices were not secured in 1913.

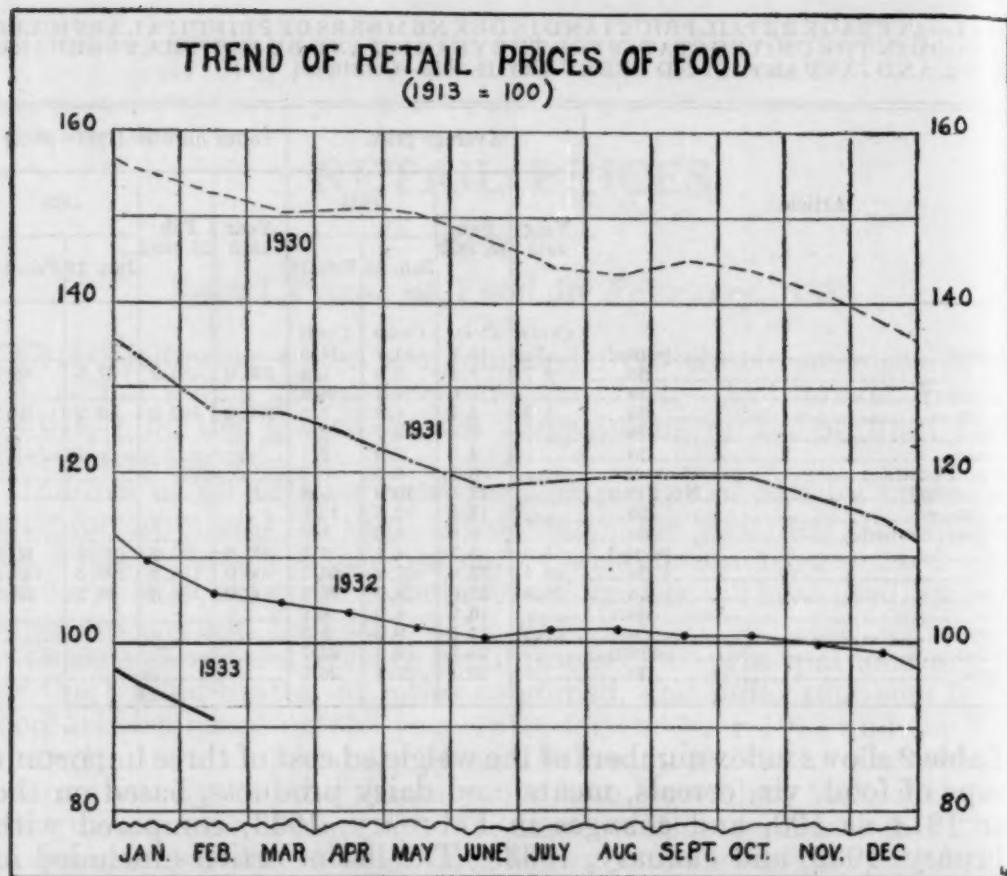


TABLE 3.—INDEX NUMBERS OF THE WEIGHTED COST OF FOOD AND PER CENT OF CHANGE FEBRUARY 15, 1933, COMPARED WITH FEBRUARY 15, 1932, AND JANUARY 15, 1933, BY CITIES AND FOR THE UNITED STATES

City	Index 1913=100.0					City	Index 1913=100.0					Per cent of change February, 1933, compared with—
	Febr- uary, 1932	Jan- uary, 1933	Febr- uary, 1933	Febr- uary, 1932	Jan- uary, 1933		Febr- uary, 1932	Jan- uary, 1933	Febr- uary, 1933	Febr- uary, 1932	Jan- uary, 1933	
United States...	105.3	94.8	90.9	-13.7	-4.1	Minneapolis.....	106.3	92.0	86.7	-18.4	-5.7	
Atlanta.....	102.3	92.0	87.6	-14.4	-4.8	Mobile.....	106.2	92.2	86.7	-12.2	-4.6	
Baltimore.....	108.3	99.3	94.2	-13.0	-5.2	Newark.....	106.6	98.5	91.9	-13.8	-6.7	
Birmingham.....	102.4	92.7	89.2	-12.8	-3.7	New Haven.....	113.9	101.5	96.0	-15.7	-5.4	
Boston.....	105.6	98.1	92.6	-12.3	-5.6	New Orleans.....	106.5	96.2	91.1	-14.4	-5.3	
Bridgeport.....				-13.9	-5.5	New York.....	110.8	102.6	97.0	-12.5	-5.4	
Buffalo.....	103.5	98.0	92.9	-10.3	-5.2	Norfolk.....	106.8	98.9	91.9	-19.9	-8.6	
Butte.....				-16.6	-4.3	Omaha.....	101.4	85.4	82.5	-18.7	-3.4	
Charleston, S. C.....	111.0	97.3	91.6	-17.4	-5.9	Peoria.....	108.6	96.8	92.6	-14.1	-4.1	
Chicago.....	113.8	97.7	95.1	-16.5	-2.7	Philadelphia.....	103.1	90.7	87.0	-14.7	-4.4	
Cincinnati.....	106.0	95.1	91.3	-13.8	-4.0	Pittsburgh.....	103.1	90.7	87.0	-15.6	-4.0	
Cleveland.....	101.5	88.2	84.7	-16.6	-3.9	Portland, Me.....	105.4	90.2	85.5	-12.8	-3.9	
Columbus.....				-14.8	-4.5	Portland, Oreg.....	105.4	98.7	93.8	-13.4	-5.2	
Dallas.....	100.9	90.4	85.7	-15.0	-5.2	Providence.....	109.1	98.9	91.8	-11.1	-5.0	
Denver.....	97.1	92.9	87.1	-10.2	-6.3	Richmond.....	109.1	98.9	91.8	-15.8	-7.2	
Detroit.....	99.5	89.6	86.7	-12.9	-3.3	Rochester.....				-15.0	-4.4	
Fall River.....	104.4	94.0	89.9	-14.0	-4.5	St. Louis.....	107.9	94.1	90.4	-16.2	-3.9	
Houston.....				-18.6	-4.1	St. Paul.....				-14.8	-3.0	
Indianapolis.....	100.5	87.8	84.3	-16.1	-4.0	Salt Lake City.....	92.3	82.2	78.4	-15.1	-4.6	
Jacksonville.....	94.6	86.0	82.2	-13.1	-4.4	San Francisco.....	110.3	102.2	98.4	-10.8	-3.8	
Kansas City.....	102.3	93.9	91.3	-10.7	-2.7	Savannah.....				-13.3	-4.9	
Little Rock.....	93.4	81.3	80.7	-13.7	-0.8	Scranton.....	111.0	102.0	97.5	-12.2	-4.4	
Los Angeles.....	99.6	91.8	86.9	-12.8	-5.4	Seattle.....	104.9	94.1	90.3	-14.0	-4.1	
Louisville.....	99.0	88.5	84.7	-14.5	-4.3	Springfield, Ill.....				-12.5	-3.3	
Manchester.....	103.9	96.1	90.9	-12.6	-5.4	Washington.....	110.1	101.4	97.2	-11.7	-4.1	
Memphis.....	99.8	86.1	82.8	-17.0	-3.8	Hawaii: Honolulu.....				-15.1	-2.0	
Milwaukee.....	108.7	95.4	94.8	-12.8	-0.6	Other localities.....				-16.3	-2.9	

Table 4 shows weighted index numbers of the retail cost of food in each of 39 cities and for the United States (all cities combined) by months and years from January, 1929, to December, 1932, inclusive. These index numbers are based on the average cost of food in the year 1913 as 100. The figures are a continuation of data published in Bulletin 495 (pp. 30 and 31).

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL COST OF FOOD IN SPECIFIED CITIES BY MONTHS AND YEARS JANUARY, 1929, TO DECEMBER, 1932, INCLUSIVE

[1913=100]

City and year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Aver- age for year
Atlanta:													
1929	161.3	159.6	157.9	156.5	157.7	158.5	161.0	163.7	164.0	163.5	160.3	158.1	160.1
1930	155.9	152.8	149.2	150.0	147.6	145.5	146.0	143.9	146.0	145.5	141.4	137.3	146.8
1931	133.3	127.6	126.3	125.6	121.4	119.8	119.6	119.2	117.6	115.3	115.3	111.9	121.2
1932	106.0	102.3	102.3	101.4	100.7	100.1	99.6	99.3	98.6	97.7	96.3	95.1	100.0
Baltimore:													
1929	157.8	157.5	155.4	153.6	156.8	159.3	163.9	166.1	166.0	166.4	163.6	162.2	160.7
1930	160.1	157.9	153.2	154.6	153.9	152.5	148.4	147.0	149.5	149.4	146.1	141.8	151.3
1931	139.1	132.5	132.1	129.4	125.3	123.0	123.8	124.9	124.7	124.2	120.5	118.5	126.6
1932	113.9	108.3	107.2	106.4	102.3	102.5	106.4	104.8	105.7	104.6	103.8	103.2	105.9
Birmingham:													
1929	161.0	159.9	156.8	157.0	157.5	158.5	160.2	162.5	162.1	162.2	162.4	160.3	160.1
1930	158.5	153.5	151.4	153.7	152.3	150.2	149.7	149.2	149.7	147.4	143.7	141.8	150.2
1931	136.6	130.6	126.4	122.2	118.5	114.5	116.1	116.3	115.8	114.6	113.2	110.1	119.8
1932	107.1	102.4	103.4	104.9	101.3	98.1	99.1	100.8	98.3	99.9	100.1	99.1	101.2
Boston:													
1929	155.3	155.4	153.7	152.3	154.2	153.8	160.7	164.2	161.6	162.5	162.6	160.2	158.1
1930	157.8	156.5	152.5	153.3	151.9	150.2	148.8	147.3	149.0	149.0	147.3	143.0	150.7
1931	134.9	128.8	127.9	125.0	121.3	120.1	121.4	123.7	123.7	125.1	123.9	117.9	124.4
1932	109.7	105.6	104.7	103.6	100.4	99.9	103.5	102.8	102.2	102.6	102.2	101.6	103.2
Buffalo:													
1929	159.2	159.6	158.3	154.3	156.4	159.8	163.3	166.4	166.0	165.7	164.7	163.1	161.3
1930	159.3	157.4	154.0	154.7	154.0	152.2	146.3	147.6	149.7	149.5	146.4	140.3	150.9
1931	133.9	129.0	127.5	126.1	123.7	121.0	121.5	122.6	122.9	123.3	120.7	110.3	123.6
1932	107.6	103.5	107.5	110.8	106.6	104.7	106.6	106.3	104.3	104.5	102.7	103.8	105.2
Charleston, S. C.:													
1929	157.2	156.0	155.2	155.6	155.2	155.7	155.8	161.6	162.2	162.2	162.4	160.4	158.3
1930	157.9	156.6	153.7	154.6	153.7	150.6	149.0	150.9	150.3	149.2	145.6	142.2	151.2
1931	138.1	132.6	132.0	129.5	125.1	123.2	123.3	123.9	123.9	123.6	119.1	117.8	126.1
1932	114.9	111.0	109.6	108.4	106.5	104.4	104.6	104.0	104.0	103.3	101.1	100.1	106.1
Chicago:													
1929	164.9	165.3	164.4	163.9	164.6	166.5	170.0	171.2	171.0	170.5	170.5	171.6	167.7
1930	168.3	165.5	163.4	164.4	162.8	160.9	155.9	154.6	158.0	156.5	152.5	149.4	158.6
1931	144.9	138.8	136.9	134.5	132.1	130.1	132.2	134.4	133.8	131.3	129.3	126.3	133.6
1932	119.0	113.8	116.3	113.8	109.3	108.6	111.2	110.4	109.9	109.5	107.9	102.3	111.2
Cincinnati:													
1929	158.6	159.8	157.9	156.5	160.8	161.9	164.1	164.6	165.7	166.8	166.6	165.0	162.6
1930	161.8	162.2	158.9	161.3	157.7	156.0	152.5	152.8	154.5	152.9	149.9	145.3	155.9
1931	141.1	135.2	133.5	131.2	127.8	125.7	126.8	126.9	126.0	125.6	123.2	119.7	128.6
1932	113.1	106.0	105.6	101.1	99.0	99.4	101.2	98.6	97.8	96.3	96.5	97.4	101.0
Cleveland:													
1929	151.5	152.7	149.4	148.2	151.6	155.2	158.2	160.9	160.4	157.6	155.1	151.2	154.4
1930	150.9	150.3	146.7	148.9	147.5	146.1	141.9	142.2	143.4	140.0	137.7	133.2	144.2
1931	128.2	123.5	123.8	119.3	118.1	113.3	113.8	115.2	114.3	112.3	109.5	107.1	116.4
1932	104.3	101.5	98.7	98.1	96.6	95.9	98.9	97.0	95.4	93.8	92.5	91.8	97.2
Dallas:													
1929	155.9	156.0	156.9	154.3	154.0	155.3	156.5	158.2	159.9	159.4	157.8	159.0	157.0
1930	155.3	151.5	151.0	149.8	148.2	144.5	143.9	142.0	143.1	142.7	142.4	138.6	146.0
1931	134.1	128.1	125.7	119.8	115.4	112.2	111.8	113.0	111.6	111.8	110.5	112.7	117.3
1932	105.9	100.9	100.4	101.0	98.1	92.4	93.1	94.0	94.4	95.4	95.6	96.2	97.4
Denver:													
1929	138.1	138.7	136.6	136.2	138.1	140.9	144.4	144.4	142.1	143.5	142.5	141.9	140.8
1930	138.2	137.0	133.9	135.6	135.7	134.2	130.5	127.7	130.8	128.6	126.3	121.9	131.9
1931	118.4	111.9	112.1	111.6	109.1	108.5	110.3	110.5	109.6	109.5	107.6	105.7	110.4
1932	99.2	97.1	97.4	95.4	94.7	93.5	94.9	95.3	95.0	94.7	94.2	94.8	95.6

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL COST OF FOOD IN SPECIFIED CITIES BY MONTHS AND YEARS JANUARY, 1929, TO DECEMBER, 1932, INCLUSIVE—Continued

[1913=100]

City and year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Average for year
Detroit:													
1929	161.2	160.7	159.5	157.6	159.9	164.2	168.4	170.3	169.3	166.4	164.7	162.8	163.7
1930	161.7	154.4	154.1	156.4	153.7	152.2	146.9	146.7	148.7	145.9	139.4	136.7	149.7
1931	134.5	126.9	127.2	125.9	123.7	118.3	117.6	120.9	121.8	118.1	112.6	111.0	121.6
1932	105.1	99.5	99.5	96.4	93.7	95.5	100.6	95.8	94.1	92.2	91.0	91.5	96.3
Fall River:													
1929	154.2	151.5	151.5	149.3	149.0	150.6	157.0	159.6	160.1	159.6	158.3	156.4	154.8
1930	153.3	150.9	146.8	146.7	146.1	145.8	142.9	140.9	142.3	143.2	141.6	134.3	144.6
1931	127.9	122.1	122.2	121.5	118.1	114.5	115.6	115.0	116.4	117.5	116.0	113.3	118.3
1932	107.7	104.4	104.3	102.8	100.6	98.4	100.0	100.5	99.7	98.9	97.6	97.3	101.2
Indianapolis:													
1929	153.1	153.4	152.1	149.0	151.2	152.1	157.3	159.7	160.7	160.0	157.6	156.2	155.5
1930	153.5	153.0	148.8	151.4	151.4	149.1	144.6	141.8	145.3	141.7	139.0	131.5	146.1
1931	128.8	120.5	122.3	118.7	115.1	112.7	115.1	116.1	114.8	113.8	110.2	108.7	116.5
1932	102.5	100.5	99.5	98.9	95.6	96.0	100.4	98.3	94.9	94.4	92.5	93.4	97.2
Jacksonville:													
1929	142.8	140.7	141.1	139.8	140.1	143.1	145.5	149.3	149.6	149.5	147.3	146.3	144.5
1930	143.5	139.4	139.3	138.1	137.4	137.1	137.4	137.0	138.9	137.6	134.7	133.3	137.7
1931	127.6	122.6	120.1	115.5	114.3	112.7	111.3	111.5	111.6	110.9	108.4	105.3	114.3
1932	101.4	94.6	94.9	94.5	92.8	92.8	90.8	94.3	93.8	92.6	91.6	90.9	93.8
Kansas City:													
1929	152.8	153.8	151.9	149.2	149.8	151.2	154.8	157.6	159.3	158.0	157.1	156.1	154.2
1930	155.1	153.9	150.6	151.7	150.3	145.9	136.1	138.6	141.3	139.8	137.1	134.4	144.4
1931	131.6	126.1	126.8	126.0	122.6	119.8	119.8	117.7	117.4	117.4	114.2	113.5	120.9
1932	106.6	102.3	102.6	101.3	98.9	97.8	96.1	98.0	98.7	99.3	98.7	98.5	100.1
Little Rock:													
1929	151.5	151.9	149.1	147.9	149.4	149.0	150.1	153.5	155.7	155.3	154.3	153.3	151.8
1930	151.9	150.2	145.4	146.2	144.7	140.8	140.0	141.0	140.7	139.7	136.0	132.3	142.5
1931	125.4	118.9	119.5	117.5	113.3	110.0	110.4	108.6	110.4	109.1	105.4	104.0	112.8
1932	98.0	93.4	93.0	92.2	90.5	85.4	89.7	91.2	91.5	91.3	89.4	87.4	91.1
Los Angeles:													
1929	144.6	142.4	141.6	141.4	143.5	144.2	144.9	148.4	151.2	151.4	149.7	143.9	145.6
1930	142.5	138.8	137.8	140.2	138.2	133.7	131.0	130.9	132.6	131.9	128.3	123.6	134.0
1931	118.2	115.5	114.5	111.1	109.8	105.5	106.0	107.8	110.2	108.6	108.9	108.0	110.5
1932	102.7	99.6	96.0	92.8	92.6	89.9	89.7	85.4	92.3	92.5	94.2	93.8	93.4
Louisville:													
1929	154.4	156.9	155.4	153.9	156.9	156.6	156.1	157.1	159.1	158.2	157.0	154.8	156.5
1930	150.8	151.1	146.8	149.5	147.7	145.1	139.1	142.5	143.6	139.0	136.3	131.3	143.5
1931	126.8	120.4	118.6	115.7	114.7	111.9	112.6	112.7	111.4	111.1	108.4	107.8	114.3
1932	103.1	99.0	98.8	97.1	95.4	92.7	93.0	93.2	92.6	91.7	92.1	93.2	95.4
Manchester:													
1929	152.5	151.1	150.7	147.6	149.3	150.6	157.1	160.0	158.8	157.9	157.5	153.1	154.0
1930	151.3	150.8	146.6	147.7	147.1	146.3	143.6	142.6	144.1	143.1	140.6	134.4	145.0
1931	128.7	123.1	123.2	122.1	120.3	118.5	119.8	122.2	122.0	120.6	118.2	110.8	120.8
1932	107.3	103.9	103.9	102.8	100.7	99.0	102.1	103.6	102.6	101.1	101.5	100.2	102.4
Memphis:													
1929	150.4	150.0	147.5	147.8	148.7	150.6	152.5	154.9	153.6	152.1	152.5	151.5	150.9
1930	150.6	148.6	144.7	140.7	145.4	142.3	139.1	139.5	139.6	137.8	134.1	129.1	141.6
1931	125.4	117.7	115.9	115.3	112.3	109.8	109.2	110.4	110.2	110.2	107.1	105.0	112.5
1932	101.2	99.8	98.5	97.0	96.7	92.1	92.3	93.4	93.4	92.4	91.8	90.4	94.9
Milwaukee:													
1929	156.0	157.2	155.9	152.8	153.6	155.7	165.3	165.0	164.4	164.5	162.5	160.0	159.3
1930	158.3	157.1	155.2	156.2	155.3	151.5	145.6	145.1	147.6	146.6	143.1	138.1	149.9
1931	133.4	128.1	126.9	125.1	123.7	121.8	123.8	124.5	123.2	122.1	119.3	115.1	124.0
1932	113.7	108.7	109.3	108.3	104.6	103.3	105.0	102.9	102.2	102.0	101.3	100.6	105.3
Minneapolis:													
1929	153.8	155.7	155.5	153.2	153.9	155.9	150.4	150.3	161.4	160.8	160.2	159.2	157.4
1930	156.8	153.9	151.9	152.7	150.8	151.7	143.4	143.1	146.5	145.7	143.3	138.9	148.2
1931	134.3	128.7	127.3	123.8	121.9	121.0	123.9	121.8	120.3	119.7	117.0	114.2	122.8
1932	110.4	106.3	105.1	102.4	100.0	99.3	99.8	98.3	98.1	98.5	98.3	98.1	101.0
Newark:													
1929	149.6	147.9	146.3	146.2	147.8	149.0	152.0	155.3	155.2	156.2	155.0	153.7	151.2
1930	149.6	147.9	144.6	145.6	145.0	142.6	139.4	139.1	141.2	143.3	139.3	134.7	142.8
1931	130.9	127.0	126.2	124.8	123.7	119.8	121.0	122.5	122.5	124.4	118.7	114.2	123.0
1932	109.6	106.6	106.7	108.6	105.8	104.8	106.5	104.3	105.1	105.3	102.0	105.8	

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL COST OF FOOD IN SPECIFIED CITIES BY MONTHS AND YEARS JANUARY, 1929, TO DECEMBER, 1932, INCLUSIVE—Continued

[1913=100]

City and year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Aver- age for year
New Haven:													
1929	156.1	154.9	154.7	152.0	153.1	154.6	159.3	162.0	165.0	164.6	163.9	161.7	158.3
1930	157.4	153.7	150.3	150.3	150.5	148.2	146.1	145.4	147.5	149.0	147.7	145.4	149.2
1931	138.6	133.7	131.4	128.7	125.4	123.5	124.5	125.0	126.1	126.0	124.1	122.5	127.5
1932	118.8	113.9	113.8	112.2	108.8	107.3	107.7	107.3	106.9	106.4	104.7	104.5	109.5
New Orleans:													
1929	154.9	154.8	153.9	153.1	154.2	153.9	157.1	158.8	159.5	159.3	158.8	158.0	156.3
1930	155.7	153.7	151.4	151.3	147.1	145.2	142.9	143.1	145.1	143.0	139.3	136.8	146.2
1931	132.2	126.7	123.8	120.5	115.8	112.1	114.1	113.9	115.7	114.6	113.2	112.2	117.9
1932	109.3	106.5	105.4	103.9	99.1	95.7	97.1	99.7	100.8	99.1	97.4	98.9	104.4
New York:													
1929	157.9	156.6	155.3	155.0	155.6	157.2	160.7	163.3	164.1	165.2	163.6	161.7	159.7
1930	157.0	155.4	152.6	153.1	151.2	150.0	146.7	147.0	149.8	149.3	147.1	141.9	150.0
1931	137.0	133.2	131.0	128.8	127.3	124.9	125.5	126.5	126.9	128.1	124.4	119.4	127.9
1932	115.6	110.8	111.5	111.2	110.0	108.7	109.3	109.2	109.2	109.8	109.0	106.3	110.2
Omaha:													
1929	148.7	149.0	148.9	147.2	145.4	148.3	150.1	148.2	152.9	152.3	151.7	151.1	149.6
1930	150.5	148.3	144.7	146.8	146.4	144.9	135.9	136.2	139.7	136.6	134.6	131.7	141.5
1931	125.1	118.0	119.3	117.4	114.4	114.0	114.8	114.3	112.7	111.7	108.6	106.2	114.4
1932	103.7	101.4	100.3	98.3	94.4	92.3	92.5	91.8	93.5	93.3	91.0	91.0	95.3
Philadelphia:													
1929	155.9	155.5	153.7	152.6	156.4	156.7	160.3	163.5	164.3	165.0	163.9	163.2	159.2
1930	157.8	155.6	151.2	152.1	152.1	149.1	144.5	143.3	147.1	147.2	145.5	140.4	148.9
1931	134.9	130.1	129.9	129.5	127.5	126.3	126.3	127.9	126.9	127.4	124.8	122.3	128.0
1932	111.6	108.6	108.5	107.0	105.1	104.7	105.0	104.2	104.5	105.1	102.5	100.5	105.8
Pittsburgh:													
1929	158.7	158.4	157.5	153.5	156.4	158.7	160.4	162.9	163.5	162.6	160.6	159.6	159.6
1930	157.0	153.3	149.2	149.8	149.5	149.0	143.2	143.0	148.7	146.5	141.5	136.7	147.4
1931	132.3	127.3	127.2	125.1	122.4	119.6	119.8	120.0	119.6	117.6	115.8	111.7	121.7
1932	106.3	103.1	103.0	102.0	98.1	97.2	97.7	98.0	98.6	99.1	97.2	96.5	99.7
Portland, Oreg.:													
1929	141.1	141.4	138.7	138.6	141.9	142.9	146.1	145.6	146.6	149.0	148.4	145.2	143.8
1930	141.0	140.0	139.5	140.2	139.3	135.6	130.6	128.4	128.8	128.3	124.2	119.1	133.0
1931	114.5	112.3	111.0	108.4	108.9	109.3	108.2	107.9	108.0	107.5	107.1	107.1	109.2
1932	100.1	98.5	97.3	97.0	96.7	93.5	94.4	94.6	94.9	95.1	92.8	94.1	95.8
Providence:													
1929	156.0	153.6	154.6	151.5	153.0	156.5	161.8	164.4	164.2	164.3	162.6	160.0	158.3
1930	157.6	155.5	151.4	152.3	150.8	148.3	146.3	145.3	148.1	146.9	145.5	139.4	149.2
1931	132.5	126.9	124.9	123.0	119.9	118.0	119.8	123.3	124.4	124.5	124.0	118.5	123.3
1932	110.4	105.4	106.0	105.6	103.3	102.9	104.1	103.0	102.2	101.6	101.7	99.9	103.8
Richmond:													
1929	150.7	161.6	161.0	159.1	162.4	159.4	160.5	162.9	166.2	166.7	164.6	161.9	162.2
1930	160.5	159.7	155.1	156.7	155.4	153.8	149.1	150.0	150.9	150.2	146.5	142.6	152.7
1931	139.4	132.5	131.9	127.3	124.9	122.1	121.1	121.4	121.6	121.5	120.2	118.6	125.4
1932	113.2	109.1	107.4	106.5	102.7	101.6	103.0	104.0	103.0	104.7	102.0	101.1	104.7
St. Louis:													
1929	158.0	157.8	157.4	155.9	160.7	161.4	165.0	164.5	165.1	163.0	163.0	161.1	161.0
1930	159.8	159.0	156.3	158.2	154.8	151.1	144.6	146.5	149.2	146.7	142.2	137.9	150.6
1931	134.5	129.8	129.8	127.6	124.4	121.7	123.1	122.6	121.0	119.8	116.5	113.7	123.7
1932	110.7	107.9	107.1	105.1	102.3	100.2	101.1	100.5	100.1	99.3	99.8	98.2	102.6
Salt Lake City:													
1929	133.3	133.4	131.9	131.3	132.2	134.7	141.8	138.8	139.1	140.3	139.5	135.5	136.0
1930	131.4	131.4	129.9	132.0	131.3	132.1	125.4	124.1	125.2	124.8	121.3	117.3	127.2
1931	111.4	108.7	108.7	106.5	106.0	107.1	105.7	106.0	105.2	104.7	102.9	101.0	106.1
1932	94.4	92.3	90.8	89.3	89.1	87.1	87.2	84.2	85.4	87.2	85.8	86.9	88.3
San Francisco:													
1929	152.3	149.7	149.7	148.9	149.7	151.4	153.6	156.3	157.4	159.2	158.9	155.3	153.5
1930	153.9	150.9	149.9	151.7	150.6	146.6	143.7	142.5	144.8	144.4	143.1	137.8	146.7
1931	133.1	128.7	126.8	123.8	122.8	120.9	121.0	117.3	119.5	120.3	118.9	115.1	122.5
1932	112.2	110.3	110.0	109.7	107.3	104.4	103.2	104.4	105.5	106.3	107.0	107.2	107.3
Scranton:													
1929	161.6	161.4	159.4	157.0	159.5	161.9	164.1	167.8	169.7	170.1	168.9	167.7	164.2
1930	163.0	161.8	156.9	157.6	158.1	156.1	151.8	151.4	152.0	151.0	148.3	144.7	154.3
1931	140.9	133.9	131.0	130.1	127.3	125.5	125.1	126.0	127.2	127.6	125.5	121.6	128.4
1932	115.4	111.0	110.6	111.0	108.8	106.9	106.6	106.0	105.8	105.9	106.2	104.9	108.3

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL COST OF FOOD IN SPECIFIED CITIES BY MONTHS AND YEARS JANUARY, 1929, TO DECEMBER, 1932, INCLUSIVE—Continued

[1913=100]

City and year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Aver- age for year
Seattle:													
1929	146.7	146.7	144.3	144.6	147.2	149.3	150.9	152.4	152.6	154.7	153.3	151.8	149.5
1930	146.5	145.5	145.6	147.4	146.8	143.7	138.7	134.3	136.2	136.2	133.9	127.4	140.3
1931	123.4	119.9	120.0	119.0	118.7	116.7	115.1	115.7	115.2	115.5	114.4	113.2	117.4
1932	106.9	104.9	104.5	104.6	102.8	100.8	101.1	99.7	98.7	97.9	98.2	98.7	101.5
Washington:													
1929	162.0	161.4	159.0	157.9	161.3	164.2	167.8	171.1	170.7	168.7	165.0	163.2	164.1
1930	161.9	160.8	156.0	157.3	155.9	154.6	150.9	149.1	154.5	155.5	150.1	146.5	154.4
1931	143.3	135.9	136.0	134.1	131.0	127.7	128.5	129.9	129.8	128.3	125.1	122.1	131.0
1932	115.1	110.1	110.5	109.8	106.2	106.1	108.1	108.7	107.9	107.4	105.8	102.3	108.1
United States:													
1929	154.6	154.4	153.0	151.6	153.3	154.8	158.5	160.2	160.8	160.5	159.7	158.0	156.7
1930	155.4	153.0	150.1	151.2	150.1	147.9	144.0	143.7	145.6	144.4	141.4	137.2	147.1
1931	132.8	127.0	126.4	124.0	121.0	118.3	119.0	119.7	119.4	119.1	116.7	114.3	121.3
1932	109.3	105.3	105.0	103.7	101.3	100.1	101.0	100.8	100.3	100.4	99.4	98.7	102.1

Retail Prices of Coal in February, 1933

RETAIL prices of coal are secured in each of the 51 cities in which retail food prices are obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or bins where an extra handling is necessary.

Average prices for the United States for bituminous coal and for stove and chestnut sizes of Pennsylvania anthracite are computed from the quotations received from retail dealers in all cities where these coals are sold for household use. The prices shown for bituminous coal are averages of prices of the several kinds. In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The following tables show average retail prices of coal per ton of 2,000 pounds on February 15, 1932, and January 15 and February 15, 1933. Table 1 shows for the United States average retail prices, index numbers (1913=100), and percentage change in the year and in the month. Table 2 shows average retail prices by cities.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF COAL FOR THE UNITED STATES, AND PER CENT OF CHANGE ON FEBRUARY 15, 1933, COMPARED WITH FEBRUARY 15, 1932, AND JANUARY 15, 1933

Article	Average retail price on—			Per cent of increase (+) or decrease (-) Feb. 15, 1933, compared with—	
	Feb. 15, 1932	Jan. 15, 1933	Feb. 15, 1933	Feb. 15, 1932	Jan. 15, 1933
Pennsylvania anthracite:					
Stove—					
Average price per 2,000 pounds.....	\$14.98	\$13.82	\$13.75	-8.2	-0.5
Index (1913=100.0).....	193.9	178.9	178.0	.....	.....
Chestnut—					
Average price per 2,000 pounds.....	\$14.95	\$13.61	\$13.53	-9.5	-0.6
Index (1913=100.0).....	188.9	171.9	171.0	.....	.....
Bituminous:					
Average price per 2,000 pounds.....	\$8.14	\$7.46	\$7.44	-8.6	-0.3
Index (1913=100.0).....	149.7	137.3	137.0	.....	.....

TABLE 2.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, FEBRUARY 15, 1932, AND JANUARY 15 AND FEBRUARY 15, 1933, BY CITIES

City, and kind of coal	1932			1933		
	1932			1933		
	Feb. 15	Jan. 15	Feb. 15	Feb. 15	Jan. 15	Feb. 15
Atlanta, Ga.:						
Bituminous, prepared sizes	\$6.50	\$6.12	\$6.20			
Baltimore, Md.:						
Pennsylvania anthracite—						
Stove	14.00	13.25	13.25			
Chestnut	13.75	12.75	12.75			
Bituminous—						
Prepared sizes—						
Low volatile	9.38	8.75	8.75			
Run of mine—						
High volatile	7.14	6.86	6.89			
Birmingham, Ala.:						
Bituminous, prepared sizes	6.44	5.07	5.00			
Boston, Mass.:						
Pennsylvania anthracite—						
Stove	15.00	13.75	13.75			
Chestnut	15.00	13.50	13.50			
Bridgeport, Conn.:						
Pennsylvania anthracite—						
Stove	14.00	12.75	12.75			
Chestnut	14.00	12.75	12.75			
Buffalo, N. Y.:						
Pennsylvania anthracite—						
Stove	13.40	12.42	12.42			
Chestnut	13.40	12.21	12.21			
Butte, Mont.:						
Bituminous, prepared sizes	9.96	9.72	9.71			
Charleston, S. C.:						
Bituminous, prepared sizes	9.50	8.67	8.67			
Chicago, Ill.:						
Pennsylvania anthracite—						
Stove	16.73	15.75	15.75			
Chestnut	16.73	15.50	15.50			
Bituminous—						
Prepared sizes—						
High volatile	7.92	7.25	7.25			
Low volatile	11.41	9.98	9.86			
Run of mine—						
Low volatile	7.48	7.19	7.19			
Cincinnati, Ohio.:						
Bituminous—						
Prepared sizes—						
High volatile	5.75	5.25	5.25			
Low volatile	8.00	7.50	7.50			
Cleveland, Ohio.:						
Pennsylvania anthracite—						
Stove	14.44	13.69	13.69			
Chestnut	14.38	13.44	13.44			
Bituminous—						
Prepared sizes—						
High volatile	6.69	5.52	5.37			
Low volatile	9.21	8.18	7.80			
Columbus, Ohio.:						
Bituminous—						
Prepared sizes—						
High volatile	5.23	4.92	4.92			
Low volatile	6.67	6.50	6.50			
Dallas, Tex.:						
Arkansas anthracite, egg	14.00	14.00	14.00			
Bituminous, prepared sizes	10.67	10.75	10.75			
Denver, Colo.:						
Colorado anthracite—						
Furnace, 1 and 2 mixed	15.00	14.50	14.56			
Stove, 3 and 5 mixed	15.00	14.50	14.56			
Bituminous, prepared sizes	8.18	7.02	6.99			
Detroit, Mich.:						
Pennsylvania anthracite—						
Stove	14.50	13.33	13.33			
Chestnut	14.50	13.17	13.17			
Bituminous—						
Prepared sizes—						
High volatile	6.27	5.80	5.87			
Low volatile	7.23	6.96	6.96			
Run of mine—						
Low volatile	6.63	6.38	6.31			
Fall River, Mass.:						
Pennsylvania anthracite—						
Stove	16.00	14.50	14.50			
Chestnut	16.00	14.25	14.25			
Houston, Tex.:						
Bituminous, prepared sizes						
Indianapolis, Ind.:						
Bituminous—						
Prepared sizes—						
High volatile	5.57	5.05	5.05			
Low volatile	8.00	7.42	7.08			
Jacksonville, Fla.:						
Bituminous, prepared sizes						
Kansas City, Mo.:						
Arkansas anthracite—						
Furnace						
Stove No. 4	11.38	10.50	10.50			
Bituminous, prepared sizes	12.67	12.17	12.17			
Little Rock, Ark.:						
Arkansas anthracite, egg						
Bituminous, prepared sizes	5.99	5.61	5.68			
Los Angeles, Calif.:						
Bituminous, prepared sizes	12.00	10.75	10.50			
Louisville, Ky.:						
Bituminous—						
Prepared sizes—						
High volatile	5.22	4.64	4.61			
Low volatile	7.50	7.25	7.19			
Manchester, N. H.:						
Pennsylvania anthracite—						
Stove	16.33	14.83	14.83			
Chestnut	16.33	14.83	14.83			
Memphis, Tenn.:						
Bituminous, prepared sizes	6.74	5.68	5.68			
Milwaukee, Wis.:						
Pennsylvania anthracite—						
Stove	16.05	15.05	14.05			
Chestnut	16.05	14.80	13.80			
Bituminous—						
Prepared sizes—						
High volatile	7.45	6.94	6.94			
Low volatile	10.01	9.29	9.29			
Minneapolis, Minn.:						
Pennsylvania anthracite—						
Stove	18.05	17.35	17.35			
Chestnut	18.05	17.10	17.10			
Bituminous—						
Prepared sizes—						
High volatile	9.87	9.56	9.56			
Low volatile	12.54	11.79	11.79			
Mobile, Ala.:						
Bituminous, prepared sizes						
Newark, N. J.:						
Pennsylvania anthracite—						
Stove	13.55	12.13	12.13			
Chestnut	13.55	11.88	11.88			
New Haven, Conn.:						
Pennsylvania anthracite—						
Stove	14.90	13.90	13.85			
Chestnut	14.90	13.90	13.85			
New Orleans, La.:						
Bituminous, prepared sizes						
New York, N. Y.:						
Pennsylvania anthracite—						
Stove	13.83	11.89	11.70			
Chestnut	13.83	11.64	11.45			
Norfolk, Va.:						
Pennsylvania anthracite—						
Stove						
Chestnut	14.50	13.00	13.00			
Bituminous—						
Prepared sizes—						
High volatile	7.00	6.50	6.50			
Low volatile	9.00	8.00	8.00			
Run of mine—						
Low volatile	7.00	6.50	6.50			
Omaha, Nebr.:						
Bituminous, prepared sizes						
Peoria, Ill.:						
Bituminous, prepared sizes	8.77	8.35	8.35			

TABLE 2.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, FEBRUARY 15, 1932, AND JANUARY 15 AND FEBRUARY 15, 1933, BY CITIES—Continued

City, and kind of coal	1932			1933			City, and kind of coal	1932			1933			
	1932			1933				1932			1933			
	Feb. 15	Jan. 15	Feb. 15	Feb. 15	Jan. 15	Feb. 15		Feb. 15	Jan. 15	Feb. 15	Feb. 15	Jan. 15	Feb. 15	
Philadelphia, Pa.:							St. Paul, Minn.:							
Pennsylvania anthracite—							Pennsylvania anthracite—							
Stove.....	\$13.50	\$11.75	\$11.77				Stove.....	\$18.05	\$17.35	\$17.35				
Chestnut.....	13.50	11.50	11.52				Chestnut.....	18.05	17.10	17.10				
Pittsburgh, Pa.:							Bituminous—							
Pennsylvania anthracite—							Prepared sizes—							
Chestnut.....	14.00	12.75	12.75				High volatile.....	9.58	9.40	9.40				
Bituminous, prepared sizes.....	4.47	3.26	3.28				Low volatile.....	12.56	11.86	11.86				
Portland, Me.:							Salt Lake City, Utah:							
Pennsylvania anthracite—							Bituminous, prepared sizes.....	7.58	7.01	7.01				
Stove.....	16.80	15.84	15.84				San Francisco, Calif.:							
Chestnut.....	16.80	15.60	15.60				New Mexico anthracite—							
Portland, Oreg.:							Cerillos egg.....	26.00	25.00	25.00				
Bituminous, prepared sizes.....	11.99	11.52	11.41				Colorado anthracite—							
Providence, R. I.:							Egg.....	25.50	24.50	24.50				
Pennsylvania anthracite—							Bituminous, prepared sizes.....	17.00	15.00	15.00				
Stove.....	15.75	14.75	14.75				Savannah, Ga.:							
Chestnut.....	15.75	14.50	14.50				Bituminous, prepared sizes.....	8.45	8.28	8.12				
Richmond, Va.:							Scranton, Pa.:							
Pennsylvania anthracite—							Pennsylvania anthracite—							
Stove.....	14.50	13.50	13.50				Stove.....	10.05	8.93	8.97				
Chestnut.....	14.50	13.50	13.50				Chestnut.....	10.03	8.68	8.72				
Bituminous—							Seattle, Wash.:							
Prepared sizes—							Bituminous, prepared sizes.....	10.17	9.79	9.86				
High volatile.....	7.83	6.83	6.83				Springfield, Ill.:							
Low volatile.....	8.77	8.08	8.08				Bituminous, prepared sizes.....	4.34	3.68	3.68				
Run of mine—							Washington, D. C.:							
Low volatile.....	7.25	6.75	6.75				Pennsylvania anthracite—							
Rochester, N. Y.:							Stove.....	15.40	14.46	14.46				
Pennsylvania anthracite—							Chestnut.....	15.40	14.15	14.15				
Stove.....	14.25	13.25	13.25				Bituminous—							
Chestnut.....	14.25	13.00	13.00				Prepared sizes—							
St. Louis, Mo.:							High volatile.....	8.46	8.18	8.25				
Pennsylvania anthracite—							Low volatile.....	10.36	10.13	10.13				
Stove.....	16.41	15.22	15.22				Run of mine—							
Chestnut.....	16.47	15.23	15.22				Mixed.....	7.50	7.50	7.50				
Bituminous, prepared sizes.....	5.73	5.44	5.47											

¹ The average price of coal delivered in bins is 50 cents higher than here shown. Practically all coal is delivered in bins.

² All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

³ Per ton of 2,240 pounds.

Retail Prices of Food in the United States and in Certain Foreign Countries

THE index numbers of retail prices of food published by certain foreign countries have been brought together with those of the Bureau of Labor Statistics of the United States Department of Labor in the subjoined table, the base years in all cases being as given in the original reports. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in prices in the several countries should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates. Indexes are shown for July of each year from 1926 to 1930, inclusive, and by months since January, 1931.

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES

Country-----	United States	Australia	Austria	Belgium	Bulgaria	Canada	China	Czechoslovakia
Computing agency--	Bureau of Statistics	Bureau of Census and Statistics	Federal Statistics Bureau	Ministry of Industry, Labor, and Social Welfare	General Direction of Statistics	Department of Labor	National Tariff Commission	Central Bureau of Statistics
Number of localities..	51	30	Vienna	59	12	60	Shanghai	Prague
Commodities included.....	42 foods	46 foods and groceries	Foods	Foods	Foods	29 foods	24 foods	Foods
Base=100.....	1913	1923-1927 (1,000)	July, 1914	1921	1926	1913	1926	July, 1914
1926								
July.....	157.0			184.9		151	101.3	
1927								
July.....	153.4			209.6		149	110.7	
1928								
July.....	152.8			203.8		147	93.2	
1929								
July.....	158.5	1,041	123	212.3		150	94.8	
1930								
July.....	144.0	958	119	205.5	87.3	149	130.0	119.0
1931								
January.....	132.8	876	109	195.1	75.0	134	104.9	107.0
February.....	127.0	864	106	186.8	74.2	129	122.0	105.6
March.....	126.4	854	105	183.1	72.1	124	117.4	104.2
April.....	124.0	851	104	180.1	70.7	121	98.7	106.2
May.....	121.0	840	104	176.6	71.6	116	98.7	107.0
June.....	118.3	833	108	176.5	71.4	111	99.6	109.3
July.....	119.0	811	110	174.8	71.5	110	96.4	107.9
August.....	119.7	805	109	171.5	69.1	112	116.5	102.2
September.....	119.4	804	109	172.9	67.3	109	124.4	104.3
October.....	119.1	805	111	170.2	68.6	107	110.0	103.1
November.....	116.7	812	110	167.9	71.3	107	103.2	99.6
December.....	114.3	809	110	160.7	70.5	107	97.0	99.1
1932								
January.....	109.3	814	111	156.5	68.1	105	98.2	98.0
February.....	105.3	829	110	151.3	66.9	100	122.8	95.6
March.....	105.0	825	109	148.2	66.9	99	114.2	100.1
April.....	103.7	824	107	144.3	66.3	98	99.1	97.3
May.....	101.3	812	108	144.8	66.0	94	98.4	100.8
June.....	100.1	803	113	143.8	66.2	93	107.3	101.4
July.....	101.0	800	110	144.4	66.2	92	101.4	97.5
August.....	100.8	796	109	142.9	64.5	96	103.6	94.4
September.....	100.3	792	110	150.8	63.9	95	102.6	97.6
October.....	100.4	786	110	155.4	64.1	96	94.9	100.0
November.....	99.4	764	109	159.4	64.1	97	87.9	102.3
December.....	98.7	759	109	156.9		96	84.5	102.3
1933								
January.....	94.8		106			95	87.3	100.4
February.....	90.9		103				94.8	

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Estonia	Finland	France	Germany	Hungary	India	Ireland	Italy
Computing agency	Bureau of Statistics	Ministry of Social Affairs	Commission of Cost of Living	Federal Statistical Bureau	Central Office of Statistics	Labor Office	Department of Industry and Commerce	Office Provincial of Economy
Number of localities	Tallin	21	Paris	72	Budapest	Bombay	105	Milan
Commodities	Foods	Foods	Foods	Foods	Foods	17 foods	Foods	Foods
Base=100	1913	January-June, 1914	January-June, 1914	October, 1913-July, 1914	1913	July, 1914	July, 1914	January-June, 1914
1926								
July	121	1,104.5	1,507	145.3	115.0	155	174	654.3
1927	117	1,102.3	1,559	156.8	125.6	154	166	524.0
1928	127	1,155.3	1,544	154.1	130.5	143	166	512.5
1929	134	1,116.4	1,590	155.7	127.2	145	166	528.3
1930	103	969.4	1,503	145.9	104.6	136	156	519.3
1931								
January	95	893.2	—	133.5	93.5	111	—	467.1
February	96	882.6	—	131.0	94.1	106	151	462.8
March	96	878.8	641	129.6	96.3	103	—	464.7
April	96	869.8	—	129.2	95.7	104	—	466.8
May	95	849.4	—	129.9	96.6	102	139	460.0
June	93	842.4	642	130.9	96.5	101	—	456.6
July	94	846.0	—	130.4	98.9	100	—	452.0
August	91	869.5	—	126.1	99.7	100	143	444.1
September	87	844.3	607	124.9	99.6	100	—	438.3
October	83	847.9	—	123.4	96.8	100	—	435.1
November	82	885.2	—	121.8	94.1	100	155	436.8
December	80	918.8	555	119.9	93.0	101	—	437.8
1932								
January	81	915.8	—	116.1	91.8	103	—	431.2
February	81	908.3	—	113.9	89.9	102	151	432.5
March	83	911.2	561	114.4	89.8	103	—	445.6
April	83	886.3	—	113.4	89.9	99	—	450.4
May	81	875.7	—	112.7	93.4	99	144	441.8
June	80	871.0	567	113.4	93.3	99	—	438.0
July	83	885.7	—	113.8	92.1	102	—	426.8
August	80	897.8	—	111.8	93.8	102	134	411.1
September	79	891.4	534	110.5	92.9	101	—	409.6
October	77	894.5	—	109.6	92.0	102	—	423.4
November	76	919.8	—	109.5	88.4	103	135	428.0
December	75	910.2	—	109.0	86.7	103	—	433.9
1933								
January	75	894.1	—	107.3	—	101	—	—
February	—	—	—	106.5	—	—	—	—

¹ June.

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Nether- lands	New Zea- land	Norway	Poland	South Africa	Sweden	Switzer- land	United Kingdom
Computing agency	Bureau of Sta- tistics	Census and Sta- tistics Of- fice	Central Bureau of Sta- tistics	Central Statisti- cal Office	Office of Census and Sta- tistics	Board of Social Welfare	Federal Labor Office	Ministry of Labor
Number of localities	Amster- dam	25	31	Warsaw	9	49	34	630
Commodities includ- ed	Foods	59 foods	Foods	Foods	24 foods	Foods	Foods	21 foods
Base=100	1911-1913	1926-1930 (1,000)	July, 1914	1927	1914 (1,000)	July, 1914	June, 1914	July, 1914
1926								
July	1 168.1	2 1,026	198		1,165	156	150	161
1927	1 163.0	2 983	175	101.1	1,188	148	157	150
1928	1 169.4	2 1,004	173	102.6	1,157	156	157	157
1929	1 165.3	2 1,013	158	94.3	1,156	148	155	149
1930	1 151.6	981	151	86.2	1,092	138	152	141
1931								
January		910	146	72.2	1,081	132	148	138
February		879	144	72.3	1,074	146	146	136
March	139.9	856	143	73.5	1,071	144	144	134
April		851	141	76.4	1,073	130	142	129
May		847	139	77.2	1,082	141	141	129
June	140.6	839	138	75.9	1,064	141	141	127
July		824	140	72.9	1,043	127	140	130
August		820	138	70.8	1,031	139	139	128
September	136.9	812	136	70.3	1,022	139	139	128
October		834	136	68.3	1,026	128	138	128
November		832	136	69.6	1,022	137	137	130
December	125.5	835	136	69.1	1,004	134	134	132
1932								
January		827	135	65.0	990	127	132	131
February		810	135	65.2	992	127	129	131
March	118.8	792	135	64.5	993	128	128	129
April		797	134	68.2	987	125	128	126
May		787	133	71.4	981	125	126	125
June	119.2	778	133	68.1	963	124	125	123
July		761	134	63.1	944	124	124	125
August		761	133	61.7	933	123	123	123
September	119.7	758	134	60.9	927	122	122	123
October		765	133	59.2	927	125	123	125
November		745	134	58.7	928	122	122	125
December	119.2	709	132	56.7	926	120	120	125
1933								
January			130	56.3	123	118	123	
February								122

¹ June.² Year.

WHOLESALE PRICES

Index Numbers of Wholesale Prices, 1913 to February, 1933

THE following table presents the index numbers of wholesale prices by groups of commodities, by years, from 1913 to 1932, inclusive, and by months from January, 1931, to date:

INDEX NUMBERS OF WHOLESALE PRICES

[1926=100.0]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1913	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.3	93.1	69.8
1914	71.2	64.7	70.9	54.6	56.6	80.2	52.7	81.4	56.8	89.9	68.1
1915	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9	69.5
1916	84.4	75.7	93.4	70.4	74.3	116.5	67.6	160.7	61.4	100.6	85.5
1917	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1	117.5
1918	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4	131.3
1919	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1	138.6
1920	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5	154.4
1921	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2	97.6
1922	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8	96.7
1923	98.6	92.7	104.2	111.3	97.3	109.3	108.7	101.1	108.9	99.7	100.6
1924	100.0	91.0	101.5	106.7	92.0	106.3	102.3	98.9	104.9	93.6	98.1
1925	109.8	100.2	105.3	108.3	96.5	103.2	101.7	101.8	103.1	109.0	103.5
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1932:											
January	52.8	64.7	79.3	59.6	67.9	81.8	74.8	75.7	77.7	65.6	67.3
February	50.6	62.5	78.3	59.5	68.3	80.9	73.4	75.5	77.5	64.7	66.3
March	50.2	62.3	77.3	58.0	67.9	80.8	73.2	75.3	77.1	64.7	66.0
April	49.2	61.0	75.0	56.1	70.2	80.3	72.5	74.4	76.3	64.7	65.5
May	46.6	59.3	72.5	54.3	70.7	80.1	71.5	73.6	74.8	64.4	64.4
June	45.7	58.8	70.8	52.7	71.6	79.9	70.8	73.1	74.7	64.2	63.9
July	47.9	60.9	68.6	51.5	72.3	79.2	69.7	73.0	74.0	64.3	64.5
August	49.1	61.8	69.7	52.7	72.1	80.1	69.6	73.3	73.6	64.6	65.2
September	49.1	61.8	72.2	55.6	70.8	80.1	70.5	72.9	73.7	64.7	65.3
October	46.9	60.5	72.8	55.0	71.1	80.3	70.7	72.7	73.7	64.1	64.4
November	46.7	60.6	71.4	53.9	71.4	79.6	70.7	72.4	73.7	63.7	63.9
December	44.1	58.3	69.6	53.0	69.3	79.4	70.8	72.3	73.6	63.4	62.6
1933:											
January	42.6	55.8	68.9	51.9	66.0	78.2	70.1	71.6	72.9	61.2	61.0
February	40.9	53.7	68.0	51.2	63.6	77.4	69.8	71.3	72.3	59.2	59.8

INDEX NUMBERS OF SPECIFIED GROUPS OF COMMODITIES, FEBRUARY, 1932, AND JANUARY AND FEBRUARY, 1933

[1926=100.0]

Group	February, 1932	January, 1933	February, 1933
Raw materials	56.9	50.2	48.4
Semimanufactured articles	61.9	56.9	56.3
Finished products	71.4	66.7	65.7
Nonagricultural commodities	69.6	64.9	63.7
All commodities other than farm products and foods	71.3	67.3	66.0

Weekly Index Numbers of Wholesale Prices

A SUMMARIZATION of the weekly index numbers for the 10 major groups of commodities and for all commodities combined as issued during the month of February will be found in the following statement:

INDEX NUMBERS OF WHOLESALE PRICES FOR WEEKS OF FEBRUARY 4, 11, 18, AND
25, 1933
[1926 = 100.0]

Group	Week ending—			
	Feb. 4	Feb. 11	Feb. 18	Feb. 25
All commodities	60.0	60.2	60.1	59.7
Farm products	40.2	41.2	41.9	40.8
Foods	53.6	54.4	54.3	53.7
Hides and leather products	68.3	68.1	67.9	67.6
Textile products	51.4	51.0	51.0	50.7
Fuel and lighting	64.7	64.7	64.4	64.3
Metals and metal products	78.1	77.9	77.6	77.4
Building materials	70.0	69.6	69.6	69.9
Chemicals and drugs	71.8	71.4	71.4	71.3
Housefurnishing goods	72.8	72.7	72.7	72.7
Miscellaneous	60.8	60.6	59.7	59.6

Wholesale Price Trends During February, 1933

THE index number of wholesale commodity prices as computed by the Bureau of Labor Statistics of the United States Department of Labor shows a decrease from January, 1933, to February, 1933. This index number which includes 784 commodities or price series weighted according to the importance of each commodity and based on the average prices for the year 1926 as 100, averaged 59.8 for February as compared with 61.0 for January, showing a decrease of 2 per cent between the two months. When compared with February, 1932, with an index number of 66.3, a decrease of over 9½ per cent has been recorded in the 12 months.

In the group of farm products decreases in the average prices of barley, corn, oats, rye, live poultry, cotton, eggs, lemons, oranges, hay, fresh milk in New York, and wool caused the group as a whole to decrease slightly less than 4 per cent from the previous month. Increases were recorded in the average prices of most wheat, calves, cows, steers, hogs, tobacco, and sweetpotatoes.

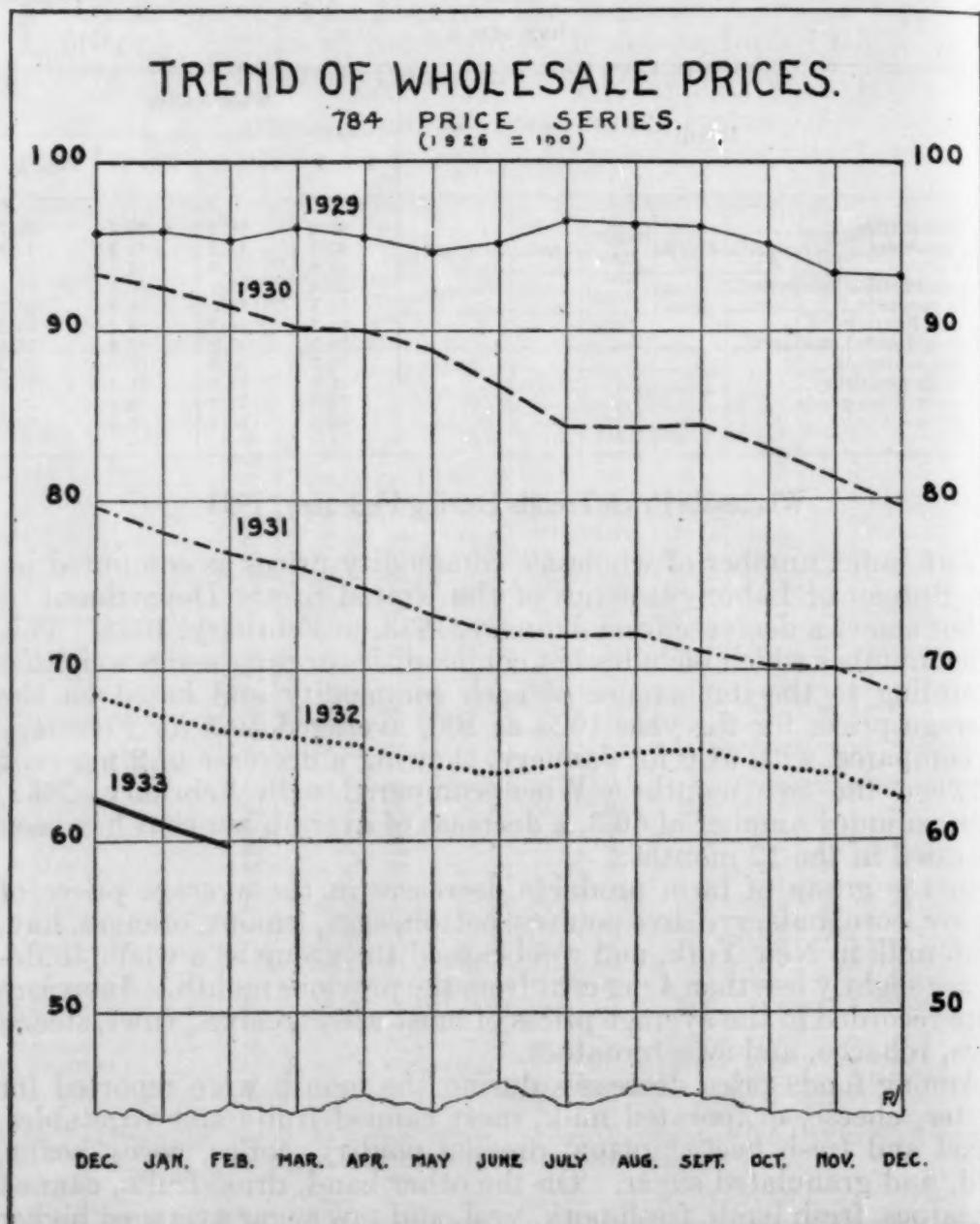
Among foods price decreases during the month were reported for butter, cheese, evaporated milk, most canned fruits and vegetables, cured and fresh beef, mutton, dressed poultry, coffee, cocoa beans, lard, and granulated sugar. On the other hand, dried fruits, canned tomatoes, fresh lamb, fresh pork, veal, and raw sugar averaged higher than in the month before. The group as a whole decreased about 3½ per cent in February when compared with January.

The hides and leather products group decreased 1½ per cent during the month due to decreases in all subgroups. Textile products as a whole decreased slightly more than 1½ per cent from January to February. All subgroups shared in the decline.

In the fuel and lighting materials group sharp reductions in the average prices of crude petroleum and petroleum products caused the

group as a whole to decline more than 3½ per cent during the month. Bituminous coal, coke, and electricity showed minor reductions also, while gas increased slightly and anthracite coal remained at the January level.

Metals and metal products as a whole showed a further downward tendency for February, with all subgroups contributing to the decline. The index for the group was 1 per cent lower than for the month



before. In the group of building materials the average prices of brick and tile, cement, and lumber moved upward during the month. Paint and paint materials, and other building materials moved downward, while structural steel showed no change during February. The group as a whole recorded a decrease of less than one-half of 1 per cent between the two months.

In the group of chemicals and drugs all subgroups showed slight recessions during February, causing the group to decline practically one-half of 1 per cent from the month before. As a whole the house-furnishing goods group decreased slightly more than three-fourths of 1 per cent from the previous month, both furniture and furnishings shared in the decline.

The group of miscellaneous commodities decreased 3½ per cent between January and February, due to declining prices of automobile tires and tubes, crude rubber, and other miscellaneous articles. Cattle feed and paper and pulp showed increases during the month.

The February averages for all the special groups of commodities were below those for January, ranging from 1 per cent in the case of semimanufactured articles to more than 3½ per cent in the case of raw materials.

Between January and February price decreases took place in 253 instances, increases in 57 instances, while in 474 instances no change in price occurred.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Groups and subgroups	February, 1932	January, 1933	February, 1933	Purchasing power of the dollar, February, 1933
All commodities.....	66.3	61.0	59.8	\$1.672
Farm products.....	50.6	42.6	40.9	2.445
Grains.....	46.1	32.9	32.7	3.058
Livestock and poultry.....	50.3	37.8	40.1	2.494
Other farm products.....	52.7	48.7	44.2	2.262
Foods.....	62.5	55.8	53.7	1.862
Butter, cheese, and milk.....	64.1	55.2	52.4	1.908
Cereal products.....	69.6	60.9	60.4	1.656
Fruits and vegetables.....	61.8	53.0	52.4	1.908
Meats.....	59.5	49.5	50.2	1.992
Other foods.....	59.4	60.1	54.1	1.848
Hides and leather products.....	78.3	68.9	68.0	1.471
Boots and shoes.....	88.5	83.3	83.3	1.200
Hides and skins.....	46.1	43.0	40.9	2.445
Leather.....	76.5	57.1	55.3	1.808
Other leather products.....	98.8	78.2	77.9	1.284
Textile products.....	59.5	51.9	51.2	1.953
Clothing.....	69.4	61.9	61.2	1.634
Cotton goods.....	56.4	50.1	49.1	2.037
Knit goods.....	55.8	48.4	48.3	2.070
Silk and rayon.....	36.5	27.0	25.6	3.906
Woolen and worsted goods.....	63.1	53.4	53.2	1.880
Other textile products.....	69.7	66.3	66.2	1.511
Fuel and lighting materials.....	68.3	66.0	63.6	1.572
Anthracite coal.....	94.8	88.7	88.7	1.127
Bituminous coal.....	84.3	79.8	79.4	1.259
Coke.....	80.4	75.3	75.2	1.330
Electricity.....	104.8	103.2	(1)	
Gas.....	98.0	96.7	(1)	
Petroleum products.....	38.6	38.7	34.3	2.915
Metals and metal products.....	80.9	78.2	77.4	1.292
Agricultural implements.....	85.1	84.5	83.1	1.203
Iron and steel.....	79.3	78.5	77.3	1.294
Motor vehicles.....	95.3	91.3	90.9	1.100
Nonferrous metals.....	52.7	46.4	46.2	2.165
Plumbing and heating.....	65.8	62.8	59.4	1.684
Building materials.....	73.4	70.1	69.8	1.433
Brick and tile.....	79.3	74.9	75.1	1.332
Cement.....	75.3	81.2	81.8	1.222
Lumber.....	62.9	55.9	56.4	1.773
Paint and paint materials.....	75.1	68.1	68.0	1.471
Plumbing and heating.....	65.8	62.8	59.4	1.684
Structural steel.....	77.9	81.7	81.7	1.224
Other building materials.....	80.2	79.4	78.5	1.274

¹ Data not yet available.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES—Continued

[1926=100.0]

Groups and subgroups	February, 1932	January, 1933	February, 1933	Purchasing power of the dollar, February, 1933
Chemicals and drugs				
Chemicals	75.5	71.6	71.3	\$1.403
Drugs and pharmaceuticals	80.8	79.3	79.0	1.266
Fertilizer materials	60.1	54.9	54.8	1.825
Mixed fertilizers	69.8	62.3	61.5	1.626
House-furnishing goods				
Furnishings	73.7	62.7	62.4	1.603
Furniture	77.5	72.9	72.3	1.383
Miscellaneous				
Automobile tires and tubes	75.9	73.5	72.9	1.372
Cattle feed	79.5	72.3	71.9	1.391
Paper and pulp	64.7	61.2	59.2	1.689
Rubber, crude	39.5	44.6	42.6	2.347
Other miscellaneous	48.2	38.2	40.6	2.463
Raw materials				
Semimanufactured articles	76.7	72.0	72.1	1.387
Finished products	8.6	6.5	6.1	16.393
Nonagricultural commodities				
All commodities other than farm products and foods	84.4	76.8	73.3	1.364
	56.9	50.2	48.4	2.066
	61.9	56.9	56.3	1.776
	71.4	66.7	65.7	1.522
	69.6	64.9	63.7	1.570
	71.3	67.3	66.0	1.515

COST OF LIVING

Changes in Cost of Canadian Family Budget, 1922 to 1932

THE Canadian Department of Labor has recently issued figures¹ showing the cost per week, in specified months from 1922 to 1932, of the family budget in terms of average retail prices of certain classes of commodities in some 60 Canadian cities.

The following items are included in the budget:

TABLE 1.—ITEMS OF CANADIAN FAMILY BUDGET

Item	Quantity	Item	Quantity
Foods (29):			
Beef, sirloin, steak	pounds		
Beef, shoulder	do	2	
Veal, shoulder	do	1	
Mutton, roast	do	1	
Pork, leg	do	1	
Pork, salt	do	2	
Bacon, breakfast	do	1	
Lard, pure	do	2	
Eggs, fresh	dozen	1	
Eggs, storage	do	1	
Milk	quarts	6	
Butter, dairy	pounds	2	
Butter, creamery	do	1	
Cheese, old ¹	do	1	
Cheese, new ¹	do	1	
Bread	do	15	
Flour, family ¹	do	10	
Rolled oats	do	5	
Rice ¹	do	2	
Foods (29)—Continued.			
Beans, hand-picked	pounds	2	
Apples, evaporated	do	1	
Prunes, medium	do	1	
Sugar, granulated	do	4	
Sugar, yellow	do	2	
Tea, black ¹	do	1/4	
Tea, green ¹	do	1/4	
Coffee	do	1/4	
Potatoes	bags	1/4	
Vinegar	quarts	1/16	
Starch, laundry	pounds	1/2	
Fuel and lighting:			
Coal, anthracite	tons	1/16	
Coal, bituminous	do	1/16	
Wood, hard	cords	1/16	
Wood, soft	do	1/16	
Coal oil	gallons	1	
Rent	months	1/4	

¹ Kind most sold since October, 1922.

While this budget serves to indicate the rise or fall from time to time in the cost of the included items, it is not intended to show the minimum cost of food and fuel for an average family in Canada or in any one of its Provinces. The quantities of meats, cereals, dairy products, etc., in this budget were adopted as constituting a weekly liberal allowance for the healthy family of a man engaged in hard physical labor. An average family, however, with an income sufficient to do so, would purchase less meat, etc., but more fresh and canned vegetables, fruit, etc., so that there would be little change in the total amount of expenditure for food.

For the average family of five the expenditure for the items in this budget would perhaps be equivalent to 65 per cent of the total income. It is estimated that an allowance for clothing and sundries would increase the given totals about 50 per cent.

¹ Canada. Department of Labor. Prices in Canada and other countries, 1931 (issued as a supplement to the Labor Gazette, January, 1932). Ottawa, 1932, pp. 6, 7. Prices in Canada and other countries, 1932 (issued as a supplement to the Labor Gazette, January, 1933). Ottawa, 1933, p. 6.

TABLE 2.—COST PER WEEK OF FAMILY BUDGET IN CANADA IN SPECIFIED MONTHS, 1922 TO 1932

[This budget is intended to show the change in the cost of items included, not to show the minimum cost for an average family]

Year and month	All (29) foods	Starch, laundry ($\frac{1}{2}$ pound)	Fuel and lighting	Rent ($\frac{1}{4}$ month)	Total
1922: January	\$11.03	\$0.042	\$3.53	\$6.92	\$21.52
July	10.27	.040	3.41	6.95	20.67
1923: January	10.52	.040	3.61	6.96	21.13
July	10.17	.040	3.48	6.97	20.65
1924: January	10.78	.041	3.49	6.92	21.23
July	9.91	.041	3.37	6.98	20.30
1925: January	10.77	.041	3.37	6.91	21.09
July	10.49	.041	3.28	6.89	20.70
1926: January	11.63	.041	3.44	6.86	21.96
July	11.07	.042	3.32	6.87	21.30
1927: January	11.37	.041	3.33	6.85	21.59
July	10.92	.041	3.28	6.86	21.10
December	11.17	.041	3.29	6.87	21.37
1928: January	11.19	.041	3.28	6.89	21.41
July	10.80	.041	3.26	6.91	21.01
December	11.31	.041	3.26	6.94	21.56
1929: January	11.30	.041	3.27	6.94	21.55
July	10.98	.040	3.26	6.98	21.26
December	11.83	.041	3.26	6.98	22.11
1930: January	11.88	.041	3.26	6.99	22.17
July	10.91	.040	3.24	7.07	21.26
December	10.10	.040	3.24	7.07	20.46
1931: January	9.86	.040	3.25	7.06	20.21
July	8.11	.040	3.18	6.93	18.26
December	7.85	.040	3.10	6.77	17.76
1932: January	7.68	.039	3.11	6.77	17.59
July	6.78	.039	3.06	6.34	16.21
December	7.04	.039	2.94	5.99	16.01

IMMIGRATION AND EMIGRATION

Statistics of Immigration for January, 1933

By J. J. KUNNA, CHIEF STATISTICIAN, UNITED STATES BUREAU OF IMMIGRATION

THE statistics for January show 8,138 aliens admitted to the United States, the immigrants or newcomers for permanent residence in this country numbering 1,511 and the nonimmigrants or visitors 6,627. This is a decrease of both classes compared with the previous month, when 1,846 immigrants and 7,132 nonimmigrants, a total of 8,978 aliens, were admitted. Alien departures from the country during January included 5,019 emigrants and 11,793 nonemigrants. A total of 14,159 American citizens left during the month for foreign lands and 19,792 returned.

Of the 1,511 immigrants admitted in January, 822, or 54 per cent, came from European countries. Italy, the principal source of present-day immigration from overseas, contributed 181, over two-thirds of whom came in under the immigration act of 1924, as husbands, wives, and unmarried children of United States citizens. Poland was second with 173, followed by Germany with 119. The other countries of Europe, with a total of 349, sent less than 60 each. The Western Hemisphere supplied 639 of the January immigrants, Canada and Mexico contributing the major portion or 94 per cent, 333 coming from the former and 172 from the latter. Compared with the corresponding month a year ago, European immigration dropped 37 per cent, Canadian immigration 26 per cent, and from other countries 24 per cent.

During January last, 1,220 aliens were deported from the United States for various causes under the immigration laws, and 82 indigent aliens were returned to their native land at their own request.

INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1932, TO JANUARY 31, 1933

Period	Inward					Aliens debarred from entering ¹	Outward					Aliens deported after landing ²		
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total			
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total					
July, 1932	2,079	10,534	12,613	28,006	40,619	561	11,328	24,089	35,417	50,298	94,715	2,100		
August, 1932	2,719	14,107	16,826	54,070	70,896	605	8,783	20,141	28,924	57,887	86,811	1,946		
September, 1932	3,129	21,348	24,477	60,258	84,735	596	8,856	17,290	26,146	38,368	64,514	1,645		
October, 1932	2,388	14,407	16,795	28,058	44,853	500	7,788	14,776	22,564	28,854	51,418	2,103		
November, 1932	2,006	8,681	10,687	14,879	25,566	428	8,031	13,062	21,093	22,129	43,222	1,580		
December, 1932	1,846	7,132	8,978	13,259	22,237	424	8,040	13,233	21,273	20,461	41,734	1,604		
January, 1933	1,511	6,627	8,138	14,159	22,297	270	5,019	11,793	16,812	19,792	36,604	1,220		
Total	15,678	82,836	98,514	212,689	311,203	3,474	57,845	114,384	172,229	246,789	419,018	12,198		

¹ These aliens are not included among arrivals, as they were not permitted to enter the United States.

² These aliens (exclusive of visitors across land borders) are included among aliens departed, they having entered the United States, legally or illegally, and later deported.

Immigration into Canada During 1932

A DECREASE of 25 per cent in the total number of immigrants admitted to Canada during the calendar year 1932 as compared with 1931 is shown in the Statistics of the Dominion Department of Immigration and Colonization, published in the February, 1933, issue of the Canadian Labor Gazette (p. 249). Of the 20,591 immigrants who were admitted in 1932, 3,327 were British, 13,709 were from the United States, 909 were classified as belonging to northern European races, and 2,646 to other races. In contrast with the record for 1931, these figures show a reduction of 57 per cent in British immigration, 10 per cent in the number of immigrants from the United States, 31 per cent in the number of immigrants of northern European races, and 21 per cent for other races.

In Table 1 the extent of immigration to Canada for each racial group in 1931 and 1932 is reported. Table 2 gives the sex, occupational class, and the destination of the immigrants admitted to the Dominion in 1932.

TABLE 1.—IMMIGRATION TO CANADA, BY ORIGIN, 1931 AND 1932

Origin	1931	1932	Origin	1931	1932
British:			Other races—Continued.		
English.....	4,599	2,101	Czech.....	69	69
Irish.....	871	350	East Indian.....	52	61
Scotch.....	2,010	800	Estonian.....	8	—
Welsh.....	198	76	Greek.....	23	34
Total.....	7,678	3,327	Hebrew.....	214	313
United States.....	15,195	13,709	Italian.....	467	280
Northern European races:			Japanese.....	174	119
Belgian.....	54	40	Lettish.....	1	3
Danish.....	65	49	Lithuanian.....	59	43
Dutch.....	38	30	Magyar.....	493	311
Finnish.....	100	32	Maltese.....	5	2
French.....	94	90	Moravian.....	—	3
German.....	797	562	Negro.....	14	9
Icelandic.....	—	1	Persian.....	1	1
Norwegian.....	66	54	Polish.....	560	379
Swedish.....	62	34	Portuguese.....	—	2
Swiss.....	37	17	Rumanian.....	28	31
Total.....	1,313	909	Russian.....	71	74
Other races:			Ruthenian.....	503	438
Albanian.....	5	—	Serbian.....	34	30
Arabian.....	1	2	Slovak.....	338	253
Armenian.....	5	1	Spanish.....	10	6
Bohemian.....	—	7	Spanish American.....	1	1
Bulgarian.....	14	12	Syrian.....	15	20
Chinese.....	—	1	Turkish.....	1	—
Croatian.....	113	93	Yugoslav.....	65	48
			Total.....	3,344	2,646
			Grand total.....	27,530	20,591

TABLE 2.—IMMIGRATION TO CANADA DURING 1932, BY SEX, OCCUPATIONAL CLASS, AND DESTINATION

Sex, occupational class, and destination	Via ocean ports	From the United States	Total	Sex, occupational class, and destination	Via ocean ports	From the United States	Total
<i>Sex</i>							
Men.....	1,238	4,191	5,429				
Women.....	2,866	4,393	7,259				
Children under 18.....	2,778	5,125	7,903				
Total.....	6,882	13,709	20,591				
<i>Occupational class</i>							
Farming class:							
Men.....	366	1,202	1,568				
Women.....	106	550	656				
Children.....	371	669	1,040				
Laboring class:							
Men.....	191	235	426				
Women.....	28	72	100				
Children.....	81	77	158				
Mechanics:							
Men.....	203	744	947				
Women.....	80	274	354				
Children.....	49	211	260				
Trading class:							
Men.....	210	970	1,180				
Women.....	108	368	476				
Children.....	53	181	234				
<i>Occupational class—Con.</i>							
Mining class:							
Men.....				13	42	55	
Women.....				3	6	9	
Children.....				2	5	7	
Female domestic servants:							
18 years and over.....				444	214	658	
Under 18 years.....				76	11	87	
Other classes:							
Men.....				255	908	1,253	
Women.....				2,097	2,909	5,006	
Children.....				2,146	3,971	6,117	
<i>Destination</i>							
Nova Scotia.....							
Men.....				389	527	916	
Women.....							
Children.....							
New Brunswick.....							
Men.....				92	554	646	
Women.....							
Children.....							
Prince Edward Island.....							
Men.....				13	187	200	
Women.....							
Children.....							
Quebec.....							
Men.....				1,158	2,976	4,134	
Women.....							
Children.....							
Ontario.....							
Men.....				2,879	6,433	9,312	
Women.....							
Children.....							
Manitoba.....							
Men.....				343	414	757	
Women.....							
Children.....							
Saskatchewan.....							
Men.....				411	560	971	
Women.....							
Children.....							
Alberta.....							
Men.....				815	877	1,692	
Women.....							
Children.....							
British Columbia.....							
Men.....				777	1,173	1,950	
Women.....							
Children.....							
Yukon Territory.....							
Men.....				2	8	10	
Women.....							
Children.....							
Northwest Territories.....							
Men.....				3	-----	3	
Women.....							
Children.....							

PUBLICATIONS RELATING TO LABOR

Official—United States

IOWA.—Workmen's Compensation Service. *Tenth biennial report, for the period ending June 30, 1932, and report of decisions by the department and State courts. Des Moines, 1932.* 168 pp.

Reviewed in this issue.

KANSAS.—Commission of Labor and Industry. Workmen's Compensation Department. *Annual report, for fiscal year ending June 30, 1932. Topeka, 1932.* 14 pp.

Data from advance copy of report were published in December, 1932, issue.

MASSACHUSETTS.—Department of Education. Division of Immigration and Americanization. *Annual report, for the year ending November 30, 1932. [Boston, 1933?] 15 pp.*

Through the friendly services of the division the State endeavors to assimilate its foreign-born residents and assist them in various difficulties.

— Department of Labor and Industries. *Labor Bulletin No. 163: Thirtieth annual directory of labor organizations in Massachusetts, 1931. [Boston, 1932?] 76 pp.*

MINNESOTA.—Compensation Insurance Board. *Fifth biennial report, covering the period ending December 31, 1932. St. Paul, 1933. 22 pp., charts.*

Contains an explanation of the 1931 and 1932 emergency increases in compensation insurance premium rates, with summary tables showing the experience of insurance companies writing workmen's compensation in the State.

NEW YORK.—Department of Labor. *Special Bulletin No. 176: Causes of compensated accidents, year ended June 30, 1930. Prepared by Division of Statistics and Information. Albany, 1932. 71 pp.*

Reviewed in this issue.

— *Special Bulletin No. 178: Cost of compensation, two years, 1930 and 1931. Prepared by Division of Statistics and Information. Albany, 1932. 92 pp.*

Reviewed in this issue.

— Division of Junior Placement. *Jobs for juniors. New York, 80 Centre Street, 1932. 8 pp. (Revised.)*

— *Unemployment and the junior worker: Some problems to be faced in dealing with unemployed boys and girls during a period of business depression and a suggested plan for meeting those problems. New York, 80 Centre Street, 1931. 8 pp.*

NORTH DAKOTA.—Coal Mine Inspection Department. *Fourteenth annual report, from November 1, 1931, to October 31, 1932. Bismarck, 1932. 32 pp.*

The report covers employment, production, and accidents.

— Workmen's Compensation Bureau. Minimum Wage Department. *Seventh biennial report, for the biennium ending June 30, 1932. Bismarck, [1932?]. 39 pp.*

OHIO.—Commission on Unemployment Insurance. *Report. Part II—Studies and reports. Columbus, 1933. 304 pp., charts.*

PENNSYLVANIA.—Department of Mines. *Tons of coal mined, days worked, persons employed, killed and injured, explosives used, 1932. [Harrisburg], 1933. 28 pp. (Mimeographed.)*

A tabular statement, by mines and regions, covering the salient statistics of anthracite mining in Pennsylvania for the year 1932.

WISCONSIN.—Industrial Commission. *Bureau of Unemployment Relief Series, No. 4: Unemployment relief in Wisconsin, 1932-1933. Madison, 1933.* 33 pp., map.

A report of the expenditures for unemployment relief and the types of relief given in Wisconsin during 1932, with an estimate of the cost of relief in 1933.

UNITED STATES.—Congress. House of Representatives. *Report No. 1999 (72d Cong., 2d sess.): Prevent interstate commerce in industrial activities in which persons are employed more than five days per week or six hours per day. Report [to accompany H. R. 14518] of Mr. Connery, Committee on Labor. Washington, 1933.* 5 pp.

Committee on Labor. *Six-hour day—five-day week. Hearings (72d Cong., 2d sess.) on H. R. 14105, a bill to prevent interstate commerce in certain commodities and articles produced or manufactured in industrial activities in which persons are employed more than five days per week or six hours per day, January, 1933.* Washington, 1933. 262 pp.

Committee on Ways and Means. *National emergency relief. Hearings (72d Cong., 1st sess.) on H. R. 12353, a bill to relieve destitution, to broaden the lending powers of the Reconstruction Finance Corporation, and to create employment by authorizing and expediting a public-works program and providing a method of financing such program, May and June, 1932.* Washington, 1932. 309 pp.

Senate. *Document No. 129 (72d Cong., 1st sess.): Railroad salaries. Letter of Hon. Joseph B. Eastman, member of the Interstate Commerce Commission, to Hon. James Couzens, United States Senate, transmitting certain information relative to salaries of officials on Class I railroads in December, 1929, and March, 1932.* Washington, 1932. 51 pp.

Committee on Manufactures. *Federal aid for unemployment relief. Hearings (72d Cong., 2d sess.) on S. 5125, a bill to provide for cooperation by the Federal Government with the several States in relieving the hardship and suffering caused by unemployment, and for other purposes, January and February, 1933.* Washington, 1933. 553 pp. In two parts.

Relief for unemployed transients. *Hearings (72d Cong., 2d sess.) on S. 5121, a bill to amend Title I of the emergency relief and construction act of 1932, approved July 21, 1932 (47 Stat. L. 709), by authorizing cooperation by the Federal Government with the several States and Territories in relieving distress among unemployed needy transients, January 13-25, 1933.* Washington, 1933. 203 pp.

Committee on the District of Columbia. *Emergency unemployment relief and care of persons in distress. Hearing (72d Cong., 1st sess.) on S. 4781, a bill authorizing an emergency appropriation for the relief of needy and distressed residents of the District of Columbia and for the temporary care of transient and homeless persons in said district, June 1, 1932.* Washington, 1932. 27 pp.

Committee on the Judiciary. *Thirty-hour work week. Hearings (72d Cong., 2d sess.) on S. 5267, a bill to prevent interstate commerce in certain commodities and articles produced or manufactured in industrial activities in which persons are employed more than five days per week or six hours per day, January and February, 1933.* Washington, 1933. 641 pp. In two parts.

Department of Commerce. Bureau of Foreign and Domestic Commerce. *Commerce yearbook, 1932. Vol. II—Foreign countries.* Washington, 1933. 743 pp., maps, charts.

Reviews economic conditions and events in 78 foreign countries, the subjects covered including production, prices, and, for some countries, labor conditions.

Bureau of Mines. *Annual report, for the fiscal year ended June 30, 1932.* Washington, 1932. 30 pp.

The work of the health and safety branch during the year included chemical and pathological studies of the effects of carbon monoxide, toxicity of refrigerants, silicosis, and the effects of air pollution by automobile-exhaust gas.

Technical Paper 534: Falls of roof and coal in mines operating in the Pittsburgh coal bed, Panhandle district, West Virginia, by J. W. Paul and J. N. Geyer. Washington, 1932. 34 pp., map, diagrams.

The result of studies in six mines to ascertain the methods used to prevent injury to workers from falls of roof material and of coal from the sides.

UNITED STATES.—Department of Commerce. Bureau of Mines. *Technical Paper 537: Maintenance of electrical mine equipment from the viewpoint of the safety inspector, by E. J. Gleim and H. B. Freeman. Washington, 1932.* 22 pp.

Outlines inspection procedure, discusses the most common defects in equipment, and describes some safety practices adopted.

— *Technical Paper 541: A study of mine roof of the Pittsburgh coal bed in the Pittsburgh mining district, by J. W. Paul and L. N. Plein. Washington, 1932.* 98 pp., map, diagrams.

Describes a study made to determine to what extent the methods of mining and timbering of mines influence falls of roofs and coal resulting in injury or death of workers, and calls attention to preventive measures.

— Bureau of Standards. *Circular No. 397: Safety for the household. Washington, 1932.* 102 pp., diagrams, illus.

A discussion of hazards which occur in the home, with suggestions on how to eliminate or at least reduce the great number of accidents in the household, estimated to cause approximately 30,000 deaths a year.

— Bureau of the Census. *Fifteenth Census of the United States, 1930: Occupation statistics—Color and nativity of gainful workers. Washington, 1933.* 40 pp. (Reprint of chapter 3, Volume V, Fifteenth Census reports on population.)

— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 576: Wages and hours of labor in the slaughtering and meat-packing industry in 1931. Washington, 1933.* 165 pp.

An advance summary of this report was published in the Monthly Labor Review for June, 1932.

— Women's Bureau. *Bulletin No. 97: The employment of women in the sewing trades of Connecticut (preliminary report). Washington, 1932.* 13 pp.

— *Bulletin No. 99: The installation and maintenance of toilet facilities in places of employment. Washington, 1933.* 86 pp., charts.

One of a series of handbooks being prepared by the Women's Bureau on standards and practices in working conditions for women.

— *Bulletin No. 101: The employment of women in vitreous enameling, by Ethel L. Best. Washington, 1932.* 61 pp., illus.

Reviewed in this issue.

— Department of the Interior. Office of Education. *Bulletin (1932) No. 16: Bibliography of research studies in education, 1930-31. Washington, 1932.* 459 pp.

Includes references on manual and vocational training, vocational guidance, and adult education.

— Employees' Compensation Commission. *Sixteenth annual report, July 1, 1931, to June 30, 1932. Washington, 1932.* 68 pp.

Reviewed in this issue.

Official—Foreign Countries

BELGIUM.—Ministère de l'Industrie, du Travail et de la Prévoyance Sociale. *Rapport sur la réparation des dommages résultant des accidents du travail pendant les années 1927, 1928, and 1929. Brussels, 1932.* 259 pp.

Report on the operation of the workmen's compensation law in Belgium during the years 1927 to 1929.

CANADA.—Bureau of Statistics. *Canada, 1933: The official handbook of present conditions and recent progress. Ottawa, 1933.* 192 pp., map, charts, illus.

A compilation of material obtained from different branches of the Government, including data on building operations, cooperation, cost of living, employment, industrial disputes, old-age pensions, prices, production, and unemployment relief.

CANADA.—Department of Labor. *Prices in Canada and other countries, 1932.* Ottawa, 1933. 30 pp. (Issued as a supplement to the *Labor Gazette*, January, 1933.)

Data from the report are published in this issue of the *Monthly Labor Review*.

— *Wages and hours of labor in Canada, 1930, 1931, and 1932.* Ottawa, 1933. 71 pp. (Issued as a supplement to the *Labor Gazette*, January, 1933.)

Data from this report are published in this issue of the *Monthly Labor Review*.

CZECHOSLOVAKIA.—Socialni Ustav. *Publikace Číslo 56: Světová hospodářská krise a nezaměstnanost.* Prague, 1932. 186 pp., charts.

Contains a number of articles by various authors dealing with the world's economic depression and with unemployment. Printed in Czech, with summaries in German.

DANZIG (GERMANY).—Statistisches Landesamt. *Danziger statistisches Taschenbuch, 1933.* Danzig, 1932. 176 pp., map.

Includes information on prices, wages, employment, welfare work, social insurance, etc. Some of the statistics are for 1932 but the greater part of them are for 1931 and earlier years.

FINLAND.—[Sosialiministeriö. Sosialinen Tutkimus- ja Tilastotoimisto.] *Työssä sattuneet tapaturmat vuonna 1928.* Helsingfors, 1932. 61 pp. (Suomen Virallinen Tilasto, XXVI A, uusi sarja 2.)

A report on accidents in Finland in 1928, with comparative data for earlier years. The table of contents and some of the table heads are in both Finnish and French.

— *Tilastollisen Päätoimiston. Suomen tilastollinen vuosikirja, 1932.* Helsingfors, 1932. 374 pp. (In Finnish and French.)

This statistical annual for Finland includes information on employment, work of employment offices, industrial accidents, strikes and lockouts, wages, and workers' organizations. The section of the volume giving international comparisons includes statistics on labor disputes, unemployment, and index numbers of wholesale prices and cost of living. The data relate principally to 1931 and earlier years, but for wholesale prices and cost of living figures are given for 1932.

GREAT BRITAIN.—Industrial Health Research Board. *Report No. 67: Manual dexterity—effects of training. I. Transfer of training in manual dexterity and visual discrimination, by E. M. Henshaw, P. Holman, and J. N. Langdon. II. Distribution of practice in manual dexterity, by E. M. Henshaw and P. Holman.* London, 1933. 37 pp.

Tests were carried out in these investigations to determine whether training in one form of manual operation assists in training for another form of manual activity, and the effect of overtraining and of different lengths of work period on output. The first study failed to show that there was any transferred ability as the result of training and the second that there is probably far more waste time in overtraining than is generally supposed.

— Mines Department. Safety in Mines Research Board. *Paper No. 75: Gob-fires—Part I, Explosions in sealed-off areas in nongassy seams, by T. N. Mason and F. V. Tideswell.* London, 1933. 30 pp., diagrams, illus.

— Ministry of Labor. *Report on the work of local committees for juvenile employment during the year 1931.* London, 1932. 29 pp.

A brief review of this report was published in the *Monthly Labor Review* for January, 1933 (p. 106).

GREECE.—Statistique Générale. *Annuaire statistique de la Grèce, 1931.* Athens, [1932?]. 452 pp., maps, charts. (In Greek and French.)

This general statistical yearbook of Greece includes statistics on production, prices, employment, and social insurance.

HUNGARY.—Statistikai Hivatal. *Gazdaságstatisztikai adatok, 1926–1932.* Budapest, 1932. 104 pp., charts. (In Hungarian and French.)

Contains data on social insurance, public employment service, unemployment, prices and cost of living, labor organizations, etc.

INDO-CHINA, FRENCH.—*Inspection Générale du Travail. Compte-rendu sur le fonctionnement de l'inspection générale du travail, 1931-32. Hanoi, 1932.* 24 pp.

A report of the labor inspection service in French Indo-China for the year 1931-32. The service deals with the regulation of labor contracts, industrial accidents, conciliation and arbitration of labor disputes, and placement of unemployed workers.

INTERNATIONAL LABOR OFFICE.—*International Labor Conference, sixteenth session, Geneva, 1932. Record of proceedings. Geneva, 1932. lxiii, 1003 pp. (World Peace Foundation, Boston, American agent.)*

This volume of the proceedings of the International Labor Conference held at Geneva, April 12-30, 1932, contains in addition to the reports of the sessions lists of the members of delegations and of the various committees, the resolutions submitted to the conference, the annual reports of the different countries, and the resolutions and draft conventions and recommendations adopted by the conference.

— *Methods of providing rest and alternation of shifts in automatic sheet-glass works. (Fourth item on agenda of International Labor Conference, seventeenth session, Geneva, 1933, first discussion.) Geneva, 1933. 68 pp., charts. (World Peace Foundation, Boston, American agent.)*

Report of a general survey of the present systems of regulating the methods of providing rest and the alternation of shifts in automatic sheet-glass works in various countries. This information was brought together for use in the next session of the International Labor Conference, the question of rest periods and alternation of shifts in this industry being on the agenda of the conference.

— *Studies and Reports, Series A, No. 36: Industrial relations in Great Britain, by J. H. Richardson. Geneva, 1933. 272 pp. (World Peace Foundation, Boston, American agent.)*

This is the first of a series of monographs which the International Labor Office plans to publish, dealing with the progress of industrial relations in various countries since the close of the World War. Beginning with a general outline of the social and economic background in Great Britain at the close of the war, the author takes up a study first of the trade-union movement, then of the development of employers' organizations, and devotes a chapter to methods of negotiation between the two groups of organizations. This is followed by a discussion of methods intended to promote good relations between employers and workers, dealing with such subjects as works councils, developments in the line of industrial welfare movements, progressive methods of labor management, and cooperation in national economic councils. Appendixes contain a brief bibliography, comparative hours and wages in various industries in 1914 and 1931, trade-union membership at various dates, a list of industrial disputes involving stoppages of work from 1905 to 1931, the constitution and functions of typical works councils, etc.

— *Studies and Reports, Series M, No. 9: Noncontributory pensions. Geneva, 1933. 140 pp. (World Peace Foundation, Boston, American agent.)*

A study of the noncontributory pension systems for the aged, invalids, and the blind, and for mothers, which are in force in different countries, dealing with the risks covered, conditions qualifying for the receipt of benefit, the laws relating to the computation of pension, and the financial resources and methods of administration of the various pension systems.

— *Unemployment insurance and various forms of relief for the unemployed. (Third item on agenda of International Labor Conference, seventeenth session, Geneva, 1933, first discussion.) Geneva, 1933. 299 pp. (World Peace Foundation, Boston, American agent.)*

NEW SOUTH WALES.—Department of Labor and Industry. *Report on the working of the factories and shops act, 1912, during the year 1931.* Sydney, 1933. 26 pp.

NORWAY.—Statistiske Centralbyrå. *Norges bergverksdrift, 1931.* Oslo, 1932. 39 pp.

Annual report on the mining industry in Norway for the fiscal year 1930, including statistics on number of workers employed and their wages.

QUEENSLAND (AUSTRALIA).—Department of Labor. *Report of the director of labor and chief inspector of factories and shops for year ended June 30, 1932.* Brisbane, 1932. 55 pp.

SPAIN.—Ministère du Travail et de la Prévoyance Sociale. *Oeuvre réalisée depuis la proclamation de la République jusqu'au 8 Septembre 1932.* Madrid, [1932?]. 174 pp. (In French.)

This report reviews the work of the Spanish Ministry of Labor since its creation in 1920 up to September, 1932, and compares its method of organization under the Republic with that of the former régime. All official orders issued since April, 1931, are given and the principal labor laws are discussed.

UNION OF SOUTH AFRICA.—Unemployment Investigation Committee. *Report.* Pretoria, 1932. 52 pp.

Reviewed in this issue.

WARSAW (POLAND).—Magistrat. *Prace Wydziału Statystycznego. Budżety rodzin robotniczych w Warszawie, w latach 1927-1929.* Warsaw, 1932. 18*, 58 pp.

Report of an investigation of the budgets of workers' families during the years 1927-1929 in the city of Warsaw.

Unofficial

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The Annals, Volume 164: Palestine—a decade of development.* Philadelphia, November, 1932. 283 pp.

Discusses Government, politics, economic problems, education, and social questions in Palestine. In addition to the material on Palestine, the volume includes a monograph on the French social insurance act.

CAMPBELL, C. DOUGLAS. *British railways in boom and depression.* London, P. S. King & Son (Ltd.), 1932. 125 pp.

A summary of a much longer work, not yet published. The purpose is not only to analyze the present situation, but to trace the relation of the trade fluctuations to the profits, wages, and general level of railway charges both before and since the adoption of the railways act of 1921.

CANADIAN COUNCIL ON CHILD AND FAMILY WELFARE. *Publication No. 62: "In times like these." Suggestions for the organization of community welfare and relief services, especially those dealing with the unemployed man and his family.* Ottawa, 1932. 46 pp.

— — — *Supplement A: The actual provision of relief (food, clothing, fuel, shelter, etc.).* Ottawa, 1932. 28 pp.

— — — *Supplement B: The organization of special services for problems of particular type—homeless men, unemployed women, ex-service men.* Ottawa, 1932. 21 pp.

— — — *Supplement C: The organization of relief work programs (in coordination with the social work program).* Ottawa, 1932. 10 pp.

CARLTON, FRANK TRACY. *Labor problems.* New York, etc., D. C. Heath & Co., 1933. 458 pp.

As stated in the preface to this volume, "it is the purpose of the writer to present to the student of industrial relations and to the general reader a straightforward study of the forces involved in what are commonly called labor problems.

The aim is not to justify or to condemn the practices and ideals of organized labor, of shop committees, or of employers and employers' associations; it is to analyze the phenomena of which the practices and ideals are the visible manifestations."

CONFEDERAZIONE GENERALE FASCISTA DELL'INDUSTRIA ITALIANA. *Annuario, 1931-32.* Rome, 1932. 1263 pp.

DOWNER, BENJAMIN J. *Consequences of uncontrolled immigration.* East Orange, N. J., 380 Main Street, 1932. 8 pp.

Favors the compulsory registration of aliens.

ENGINEERING SOCIETIES OF BOSTON AND EMERGENCY PLANNING AND RESEARCH BUREAU (INC.). *Unemployment relief funds for public works.* Boston, 1933. 18 pp.

A plan for the use of unemployment-relief funds for work on projects of a permanent character.

FABIAN SOCIETY. *Fabian Tract No. 239: Currency, credit, and the unemployment crisis, by Gilbert Slater.* London, 11 Dartmouth Street, Westminster, 1932. 15 pp.

FOREMAN, CLARENCE J. *Rent liens and public welfare: An economic and legal adjustment of industry.* New York, Macmillan Co., 1932. 207 pp. (Land Economics Series, edited by Richard T. Ely.)

FREDERICK, J. GEORGE. *For and against technocracy.* New York, Business Bourse, 1933. 278 pp., charts.

— *Readings in economic planning: The backgrounds, the details, the tendencies in all kinds of planning, left and right.* New York, Business Bourse, 1932. 359 pp., charts.

GEWERKSCHAFTSBUND DER ANGESTELLTEN. *Die Kommende Angestellten-Generation.* Berlin, 1933. 143 pp., charts.

Deals with the coming generation of salaried employees and officials ("white-collar workers") in Germany, including information on education and apprenticeship, working hours and earnings, etc.

GILSON, MARY B. *Unemployment insurance.* Chicago, University of Chicago Press, 1933. 30 pp.

A review of the arguments for and against unemployment insurance with particular reference to the operations of the British unemployment-insurance system. The author favors the adoption of such a system by the different States.

GOODRICH CO., B. F. *Industrial cooperative gardening: The story of a cooperative farm plan sponsored by the B. F. Goodrich Co.* Akron, Ohio [1932?]. 19 pp., illus.

Reviewed in this issue.

INTERNATIONAL INSTITUTE OF INTELLECTUAL COOPERATION. *A record of a first international study conference on the State and economic life with special reference to international economic and political relations, held at Milan on May 23-27, 1932, and organized by the International Institute of Intellectual Cooperation in collaboration with the Italian National Committee of Intellectual Cooperation.* Paris I, 2 rue de Montpensier, Palais Royal, 1932. 185 pp.

LANDSORGANISATIONEN I SVERGE. *Berättelse verksamhet dr 1931.* Stockholm, 1932. 272 pp., charts.

A report on the organization and activities of labor unions in Sweden.

LANDSORGANISATIONENS SKOLA. *Förvaltningsnämndens berättelse över verksamheten dr 1929.* Stockholm, 1929. 30 pp.

Annual report on the labor-union schools in Sweden for the fiscal year 1929, covering 24 schools and their organizations and programs.

LEWIS, CHARLES F. *A moderate rental housing project [Buhl Foundation] in Pittsburgh.* 20 pp., diagrams, illus. (Reprinted from *The Architectural Record*, vol. 70, No. 4, October, 1931.)

MAINZER, RICHARD. *Betrieb und Betriebszugehörigkeit*. Weimar, 1933. 86 pp. (Schriften des Instituts für Arbeitsrecht an der Universität Leipzig, 31. Heft.)

Deals with legislation relating to industrial establishments and their personnel in Germany, including laws dealing with trade agreements, labor protection, social insurance, and works councils.

METROPOLITAN LIFE INSURANCE CO. *Social Insurance Monograph 8: British experience with unemployment insurance. Part 2, Extent and character of the British unemployment problem*. New York, [1932?]. 50 pp., charts.

— *Social Insurance Monograph 9: British experience with unemployment insurance. Part 3, The provisions of the acts (scope, contributions, and benefits, and conditions for benefits)*. New York, [1932?]. 78 pp.

These two monographs are summarized from evidence presented before the Royal Commission on Unemployment Insurance. Part 2 gives a general view of the present employment situation in Great Britain, while Part 3 presents, in a concise and usable form, the more important features of the unemployment-insurance system.

— Policyholders Service Bureau. *Methods of organizing and conducting industrial safety contests*. New York, [1932?]. 20 pp., illus.

Analyzes practices and programs of representative industrial firms in connection with safety educational work and safety contests.

MINNESOTA, UNIVERSITY OF. Employment Stabilization Research Institute. *A new plan for unemployment reserves*, by Alvin H. Hansen and Merrill G. Murray. Minneapolis, 1933. 75 pp.

The system of unemployment reserves outlined in this report is planned to meet the problem of prolonged unemployment. In formulating the plan, the results of the operation of the various existing unemployment-insurance systems were considered and data on employment conditions in Minnesota in recent years were used as a basis for determining the measure in which such a system would meet the strain of a severe period of unemployment.

NATIONAL CONFERENCE OF SOCIAL WORK. *Proceedings at the fifty-ninth annual session, held in Philadelphia, Pa., May 15-21, 1932*. Chicago, University of Chicago Press, 1933. 694 pp.

The main subjects of division 5 of the conference program, which was devoted to industrial and economic problems, were the family, unemployment insurance, mental hygiene in hard times, and social and economic planning.

NATIONAL INDUSTRIAL CONFERENCE BOARD (Inc.). *Essentials of a program of unemployment reserves*. New York, 247 Park Avenue, 1933. 68 pp.

This study does not deal with the problem of unemployment in general but is limited to a consideration of the fundamentals or basic principles of a system of unemployment reserves. The system outlined is intended to be sufficiently flexible to be adapted to the needs of individual employers.

— *Unemployment insurance and relief in Germany*. New York, 247 Park Avenue, 1932. 107 pp., charts.

Gives the general provisions of the original law and the subsequent amendments, together with an account of the changes in the system as a result of economic conditions which have resulted in a shift toward the substitution of welfare relief in place of the unemployment insurance.

NATIONAL MUNICIPAL LEAGUE. *Elements of a low-cost housing law and its administration*, by Charles S. Ascher. New York, 309 East Thirty-fourth Street, 1933. (Supplement to the National Municipal Review, February, 1933, pp. 85-113.)

OHIO STATE UNIVERSITY. College of Commerce and Administration. Bureau of Business Research. *Miscellaneous Studies, X-37: Distribution of expenditures and a cost of living index for a professional group, by A. E. Chandler. Columbus, 1932.* 19 pp., charts. (Mimeographed.)

Data on expenditures secured from faculty members of 27 State-supported colleges and universities with a student enrollment of 2,000 in the academic year 1925-26.

PARRISH, WAYNE W. *An outline of technocracy.* New York, Farrar & Rinehart (Inc.), 1933. 242 pp.

PENNSYLVANIA, UNIVERSITY OF. Wharton School of Finance and Commerce. Industrial Research Department. *Special Report No. 5: Family conditions in Philadelphia, May, 1932.* Philadelphia, 1933. 13 pp. (Mimeographed.)

Reviewed in this issue.

PHELPS, EDITH M., Editor. *Debate index, also bibliographies on interscholastic athletics, compulsory arbitration of industrial disputes, a new liberal party, government ownership of hydroelectric power.* New York, H. W. Wilson Co., 1932. 144 pp. (The Reference Shelf, Vol. VIII, No. 5.)

PITKIN, WALTER B. *The consumer, his nature and his changing habits.* New York and London, McGraw-Hill Book Co. (Inc.), 1932. 421 pp., diagrams.

An analysis of the needs and buying habits of consumers, drawing attention to the fact that production has become a highly developed technology while little attention has been given to consumption.

RAYMOND, ALLEN. *What is technocracy?* New York and London, McGraw-Hill Book Co. (Inc.), 1933. 180 pp.

SCOTT, HOWARD, AND OTHERS. *Introduction to technocracy.* New York, John Day Co. (Inc.), 1933. 61 pp.

SUTCH, WILLIAM BALL. *Price fixing in New Zealand.* New York, Columbia University Press, 1932. 165 pp.

A thesis presented as part of the work required for the doctor's degree, dealing with Government control of prices in New Zealand during the war period, with some consideration of the effectiveness of the methods used and of how far they might be expected to meet with success under less abnormal conditions.

WILSON, F. M. HUNTINGTON. *Money and the price level.* New York, Century Co., 1932. 222 pp.

ZEUTHEN, F. *Socialforsikring i andre lande.* [Copenhagen, 1930?] 20 pp. (Sætryk af Social Tidsskrift, VI. aargang 1930, Hefte 7-8.)

A short review of social-insurance systems in foreign countries.

